INTERNET AND COMPUTING CORE CERTIFICATION

2005 Standard

IC³ Certification

Module 3 – Living Online

Institute of Applied Technology

CustomGuide
Computer Courseware

CERTIPORT APPROVED COURSEWARE

CustomGuide, Inc. is independent from Certiport, Inc. and not affiliated with Certiport in any manner. This publication may be used in assisting students to prepare for an INTERNET & COMPUTING CORE CERTIFICATION™ Exam. Neither Certiport, Inc., its agents, nor CustomGuide, Inc. warrant that use of this material will ensure success in connection with any exam.

© 2005 by CustomGuide, Inc. 1502 Nicollet Avenue South, Suite 1; Minneapolis, MN 55403

This material is copyrighted and all rights are reserved by CustomGuide, Inc. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual, or otherwise, without the prior written permission of CustomGuide, Inc.

We make a sincere effort to ensure the accuracy of the material described herein; however, CustomGuide makes no warranty, expressed or implied, with respect to the quality, correctness, reliability, accuracy, or freedom from error of this document or the products it describes. Data used in examples and sample data files are intended to be fictional. Any resemblance to real persons or companies is entirely coincidental.

The names of software products referred to in this manual are claimed as trademarks of their respective companies. CustomGuide is a registered trademark of CustomGuide, Inc.

Table of Contents

Introduction 5

Chapter One: Networks and the Internet 9
- Lesson 1-1: Introduction to Networks 10
- Lesson 1-2: A Look at Common Network Hardware 12
- Lesson 1-3: Intranets, Extranets, and Security on a Network 14
- Lesson 1-4: Telephones and Networks 16
- Lesson 1-5: The Internet 18
- Lesson 1-6: Ethernet Networks 20
- Lesson 1-7: Wireless Networks 22
- Chapter One Review 25

Chapter Two: Electronic Mail 29
- Lesson 2-1: Understanding E-mail and E-mail Addresses 30
- Lesson 2-2: Composing and Sending E-mail 32
- Lesson 2-3: Specifying Message Options 34
- Lesson 2-4: Opening and Closing an E-mail Message 36
- Lesson 2-5: Replying to a Message 38
- Lesson 2-6: Forwarding a Message 40
- Lesson 2-7: Finding Messages 41
- Lesson 2-8: Sorting Messages 42
- Lesson 2-9: Attaching and Deleting a File 44
- Lesson 2-10: Opening and Saving an Attachment 46
- Lesson 2-11: Managing E-mail 48
- Lesson 2-12: Using Folders to Organize Information 50
- Lesson 2-13: Creating a Folder 51
- Lesson 2-14: Renaming, Copying, Moving, and Deleting a Folder 52
- Lesson 2-15: Selecting One or More Mail Messages 54
- Lesson 2-16: Deleting Messages 55
- Lesson 2-17: Marking Messages as Read or Unread 56
- Lesson 2-18: Flagging Items 57
- Lesson 2-19: Exporting Information 58
- Lesson 2-20: Manually Archiving Information 60
- Lesson 2-21: Adding New Address Book Entries 62
- Lesson 2-22: Adding and Updating Contacts Using E-mail Messages 64
- Lesson 2-23: Creating a Distribution List 66
- Lesson 2-24: Deleting Contacts and Distribution Lists 68
- Lesson 2-25: Sending a Message Using the Address Book 70
- Lesson 2-26: Using the Out of Office Assistant 71
- Lesson 2-27: Changing the Message Format 72

Lesson 2-28: Understanding the Advantages of Web-based E-mail 74
Lesson 2-29: Understanding Network Etiquette 75
Lesson 2-30: Understanding Unsolicited E-mail 76
Lesson 2-31: Computer Viruses 77
Chapter Two Review 79

Chapter Three: Using the Internet 87
Lesson 3-1: Understanding Key Terms 88
Lesson 3-2: Understanding Web Browsers 90
Lesson 3-3: Understanding Web Addresses 92
Lesson 3-4: Understanding Secure Web Sites and Information Quality ..94
Lesson 3-5: Opening and Closing a Web Browser 96
Lesson 3-6: Displaying a Specific Web Page 98
Lesson 3-7: Navigating a Web Site and Using Hyperlinks 100
Lesson 3-8: Displaying and Deleting a History of Visited Web Pages 102
Lesson 3-9: Adding a Web Page to Favorites 104
Lesson 3-10: Creating Favorite Folders and Deleting Favorites 106
Lesson 3-11: Saving a Web Page 108
Lesson 3-12: Copying and Pasting Images, URLs, and Text 110
Lesson 3-13: Previewing and Printing a Web Page 112
Lesson 3-14: Downloading Images and Files 114
Lesson 3-15: Changing Your Home Page 116
Lesson 3-16: Changing Privacy Settings 117
Lesson 3-17: Selecting a Search Engine 118
Lesson 3-18: Performing an Advanced Search 120
Chapter Three Review 122

Chapter Four: The Impact of Computing and the Internet on Society 131
Lesson 4-1: The E-world 132
Lesson 4-2: People vs. Computers 134
Lesson 4-3: Computers in Business 136
Lesson 4-4: Computers in Education 138
Lesson 4-5: Computers in Healthcare 140
Lesson 4-6: Computers at Home 141
Lesson 4-7: Computers in Industry 142
Lesson 4-8: Computers in Government 143
Lesson 4-9: Ergonomics 144
Lesson 4-10: Computer-related Injuries 146
Lesson 4-11: Maintaining a Safe Working Environment 147
Lesson 4-12: Information Security 148
Lesson 4-13: Working with Passwords and User IDs 150
Lesson 4-14: Backing up Data and Preventing Theft 151
Lesson 4-15: Computer Viruses 152
Lesson 4-16: Copyright Concepts 154
Lesson 4-17: Understanding Transactions on the Web 156
Lesson 4-18: Computers and the Environment 158
Chapter Four Review 159

Index 167

© 2005 CustomGuide, Inc.

Introduction

Welcome to CustomGuide: Microsoft Word 2003. CustomGuide courseware allows instructors to create and print manuals that contain the specific lessons that best meet their students' needs. In other words, this book was designed and printed just for you.

Unlike most other computer-training courseware, each CustomGuide manual is uniquely designed to be three books in one:

- Step-by-step instructions make this manual great for use in an instructor-led class or as a self-paced tutorial.
- Detailed descriptions, illustrated diagrams, informative tables, and an index make this manual suitable as a reference guide when you want to learn more about a topic or process.
- The handy Quick Reference box, found on the last page of each lesson, is great for when you need to know how to do something quickly.

CustomGuide manuals are designed both for users who want to learn the basics of the software and those who want to learn more advanced features.

Here's how a CustomGuide manual is organized:

Chapters

Each manual is divided into several chapters. Aren't sure if you're ready for a chapter? Look at the prerequisites that appear at the beginning of each chapter. They will tell you what you should know before you start the chapter.

Lessons

Each chapter contains several lessons on related topics. Each lesson explains a new skill or topic and contains a step-by-step exercise to give you hands-on-experience.

Chapter Reviews

A review is included at the end of each chapter to help you absorb and retain all that you have learned. This review contains a brief recap of everything covered in the chapter's lessons, a quiz to assess how much you've learned (and which lessons you might want to look over again), and a homework assignment where you can put your new skills into practice. If you're having problems with a homework exercise, you can always refer back to the lessons in the chapter to get help.

How to Use the Lessons

Every topic is presented on two facing pages, so that you can concentrate on the lesson without having to worry about turning the page. Since this is a hands-on course, each lesson contains an exercise with step-by-step instructions for you to follow.

To make learning easier, every exercise follows certain conventions:

- Anything you're supposed to click, drag, or press appears **like this**.
- Anything you're supposed to type appears `like this`.
- This book never assumes you know where (or what) something is. The first time you're told to click something, a picture of what you're supposed to click appears either in the margin next to the step or in the illustrations at the beginning of the lesson.

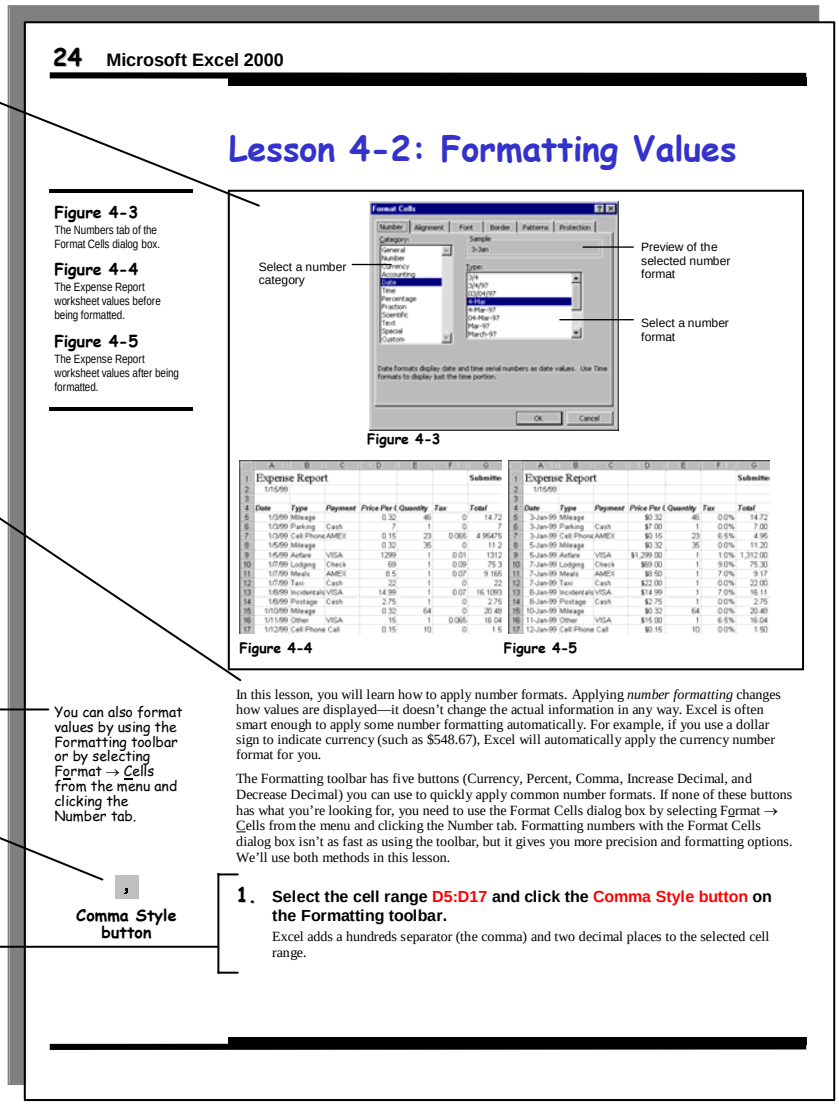
Illustrations show what your screen should look like as you follow the lesson. They also describe controls, dialog boxes, and processes.

An easy-to-understand introduction explains the task or topic covered in the lesson and what you'll be doing in the exercise.

Tips and traps appear in the margin.

Icons and pictures appear in the margin, showing you what to click or look for.

Clear step-by-step instructions guide you through the exercise. Anything you need to click appears **like this**.



24 Microsoft Excel 2000

Lesson 4-2: Formatting Values

Figure 4-3
The Numbers tab of the Format Cells dialog box.

Figure 4-4
The Expense Report worksheet values before being formatted.

Figure 4-5
The Expense Report worksheet values after being formatted.

Select a number category

Preview of the selected number format

Select a number format

Figure 4-3

Figure 4-4

Figure 4-5

In this lesson, you will learn how to apply number formats. Applying *number formatting* changes how values are displayed—it doesn't change the actual information in any way. Excel is often smart enough to apply some number formatting automatically. For example, if you use a dollar sign to indicate currency (such as $548.67), Excel will automatically apply the currency number format for you.

The Formatting toolbar has five buttons (Currency, Percent, Comma, Increase Decimal, and Decrease Decimal) you can use to quickly apply common number formats. If none of these buttons has what you're looking for, you need to use the Format Cells dialog box by selecting Format → Cells from the menu and clicking the Number tab. Formatting numbers with the Format Cells dialog box isn't as fast as using the toolbar, but it gives you more precision and formatting options. We'll use both methods in this lesson.

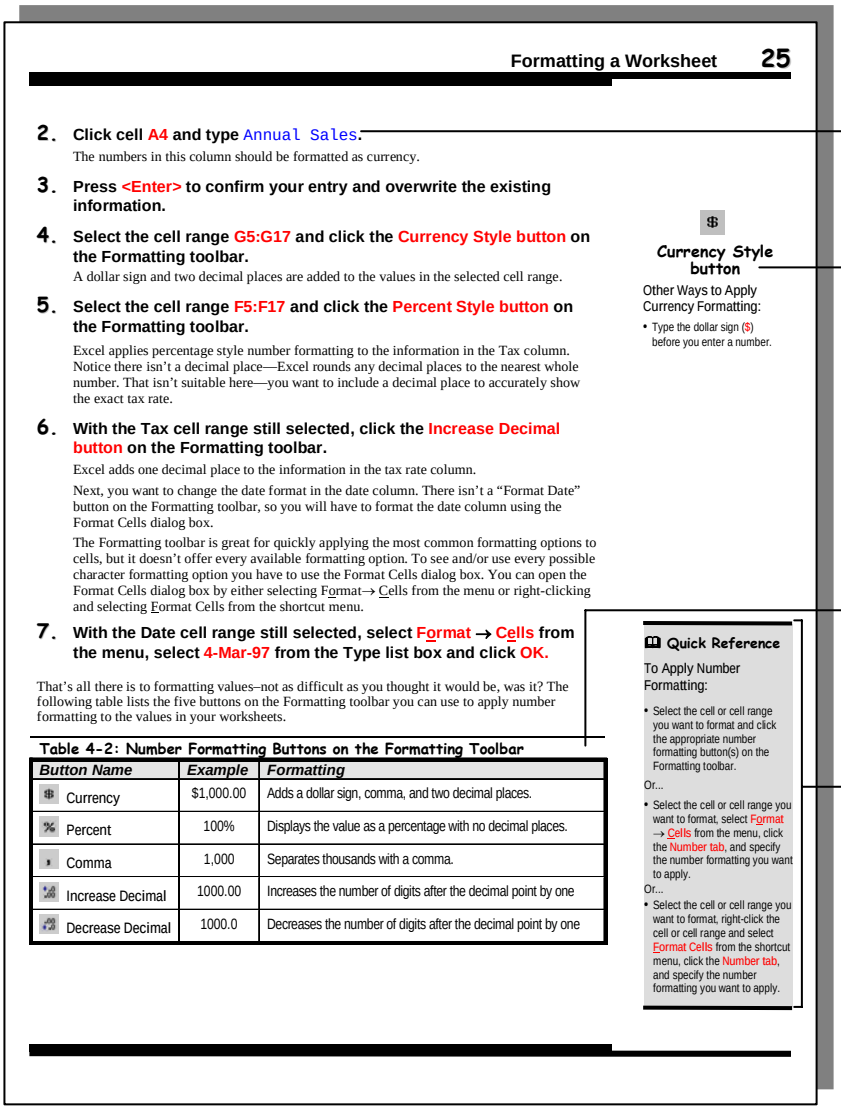
You can also format values by using the Formatting toolbar or by selecting Format → Cells from the menu and clicking the Number tab.

Comma Style button

1. **Select the cell range D5:D17 and click the Comma Style button on the Formatting toolbar.**
   Excel adds a hundreds separator (the comma) and two decimal places to the selected cell range.

© 2005 CustomGuide, Inc.

- When you see a keyboard instruction like "press **<Ctrl>** + **<B>**," you should press and hold the first key (<Ctrl> in this example) while you press the second key (<B> in this example). Then, after you've pressed both keys, you can release them.
- There is usually more than one way to do something in Word. The exercise explains the most common method of doing something, while the alternate methods appear in the margin. Use whatever approach feels most comfortable for you.
- Important terms appear in *italics* the first time they're presented.
- Whenever something is especially difficult or can easily go wrong, you'll see a:
  NOTE:
  immediately after the step, warning you of pitfalls that you could encounter if you're not careful.
- Our exclusive Quick Reference box appears at the end of every lesson. You can use it to review the skills you've learned in the lesson and as a handy reference—when you need to know how to do something fast and don't need to step through the sample exercises.



Formatting a Worksheet 25

2. **Click cell A4 and type `Annual Sales`.**
   The numbers in this column should be formatted as currency.
3. **Press <Enter> to confirm your entry and overwrite the existing information.**
4. **Select the cell range G5:G17 and click the Currency Style button on the Formatting toolbar.**
   A dollar sign and two decimal places are added to the values in the selected cell range.
5. **Select the cell range F5:F17 and click the Percent Style button on the Formatting toolbar.**
   Excel applies percentage style number formatting to the information in the Tax column. Notice there isn't a decimal place—Excel rounds any decimal places to the nearest whole number. That isn't suitable here—you want to include a decimal place to accurately show the exact tax rate.
6. **With the Tax cell range still selected, click the Increase Decimal button on the Formatting toolbar.**
   Excel adds one decimal place to the information in the tax rate column.
   Next, you want to change the date format in the date column. There isn't a "Format Date" button on the Formatting toolbar, so you will have to format the date column using the Format Cells dialog box.
   The Formatting toolbar is great for quickly applying the most common formatting options to cells, but it doesn't offer every available formatting option. To see and/or use every possible character formatting option you have to use the Format Cells dialog box. You can open the Format Cells dialog box by either selecting Format→ Cells from the menu or right-clicking and selecting Format Cells from the shortcut menu.
7. **With the Date cell range still selected, select Format → Cells from the menu, select 4-Mar-97 from the Type list box and click OK.**

That's all there is to formatting values–not as difficult as you thought it would be, was it? The following table lists the five buttons on the Formatting toolbar you can use to apply number formatting to the values in your worksheets.

Table 4-2: Number Formatting Buttons on the Formatting Toolbar

Button Name	Example	Formatting
Currency	$1,000.00	Adds a dollar sign, comma, and two decimal places.
Percent	100%	Displays the value as a percentage with no decimal places.
Comma	1,000	Separates thousands with a comma.
Increase Decimal	1000.00	Increases the number of digits after the decimal point by one
Decrease Decimal	1000.0	Decreases the number of digits after the decimal point by one

Currency Style button

Other Ways to Apply Currency Formatting:
- Type the dollar sign ($) before you enter a number.

Quick Reference

To Apply Number Formatting:
- Select the cell or cell range you want to format and click the appropriate number formatting button(s) on the Formatting toolbar.

Or...
- Select the cell or cell range you want to format, select Format → Cells from the menu, click the Number tab, and specify the number formatting you want to apply.

Or...
- Select the cell or cell range you want to format, right-click the cell or cell range and select Format Cells from the shortcut menu, click the Number tab, and specify the number formatting you want to apply.

Anything you need to type appears `like this`.

Whenever there is more than one way to do something, the most common method is presented in the exercise and the alternate methods are presented in the margin.

Tables provide summaries of the terms, toolbar buttons, or shortcuts covered in the lesson.

CustomGuide's exclusive Quick Reference is great for when you need to know how to do something fast. It also lets you review what you've learned in the lesson.

Chapter One: Networks and the Internet

Chapter Objectives:

- **Learn about networks**
- **Learn the difference between a LAN and WAN**
- **A look at common network hardware**
- **Learn about Intranets, Extranets, and network security**
- **Understand telephones used to connect to a network**
- **Understand Ethernet and wireless networks**

☑ Prerequisites

- Basic knowledge about computers.

A network is a group of computers that are connected so that they can share equipment and information. This chapter will introduce you to the fundamentals of networking. You won't be a certified network engineer after you finish this chapter, but you will know all there is to know about getting started.

This chapter covers common terminology associated with computer networks and the Internet, components and benefits of networked computers, the difference between different types of networks (for example, LAN and WAN), and how computer networks fit into other communications networks (like the telephone network and the Internet).

Lesson 1-1: Introduction to Networks

Figure 1-1

The basic components of a peer-to-peer network.

Figure 1-2

In a peer-to-peer network, everyone stores their files on their own computer. Anyone on the network can access files stored on any other computer.

Figure 1-3

In a client/server network, everyone stores their files on a central computer called a server. Everyone on the network can access the files stored on the server.

IC3

Objective: 3.1.1.1, 3.1.1.2, 3.1.1.3, and 3.1.1.4

Req. File: None

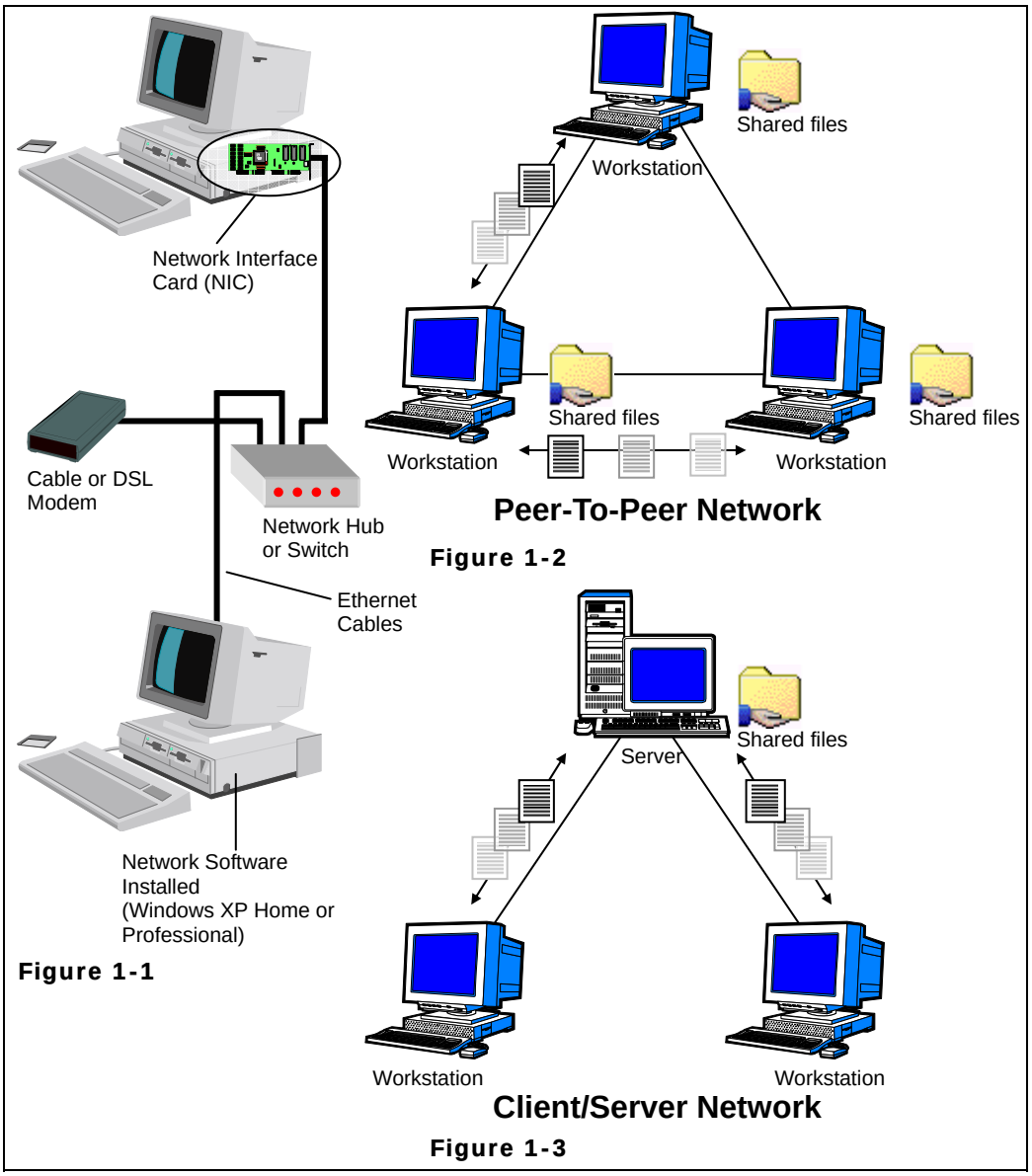


Figure 1-1

Figure 1-2

Figure 1-3

OK, so what exactly *is* a network? A network is several computers, printers, and other devices that are connected together with cables or radio signals. This allows the computers to "talk" with each other and share information and resources (usually files and printers). Networks vary in size; they can be as small as two computers connected to each other by a cable, or they can span the entire globe—the Internet is actually the world's largest network.

© 2005 CustomGuide, Inc.

So what are the benefits of networking? Plenty:

- **Share Information:** Networks allow you to share files and programs. Before networks, people had to save their files on floppy disks in order to exchange information. This wasted a lot of time—especially if the computers were located in opposite ends of the building!
- **Share Equipment:** Computers connected to a network can share equipment to reduce costs. For example, rather than buying a printer for each computer, everyone can share one central network printer.
- **Use Network Software:** Software designed for networks increases communications by letting people send and receive electronic mail (e-mail) with other users on the network, schedule meetings and workgroups with other users on the network, and share databases. When you're browsing the Web, you're actually using software designed for a network!

A Network can be distributed over a small or large area:

- **Local Area Networks (LAN):** A network that connects computers in the same geographic area or building, using cables. Local Area Networks are what most people think of when they think of a network—and what we'll be discussing throughout the chapter.
- **Wide Area Networks (WAN):** A network that connects computers across a large geographic area using telephone lines or satellites. The Internet is actually a huge Wide Area Network.

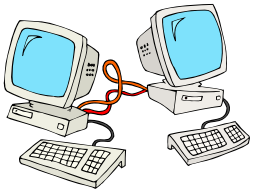
Local Area Networks (LANs) are subdivided into two types of network subcategories: peer-to-peer (or workgroups) and client/server (or domains), as shown in Figure 1-2 and Figure 1-3:

- **Peer-to-Peer Network:** In a peer-to-peer network, everyone stores their files on their own computer, and anyone on the network can access files stored on any other computer. Because you don't need any additional software (Windows XP includes peer-to-peer networking), peer-to-peer networking is an inexpensive way to connect computers in a small office or home. The disadvantages of a peer-to-peer network are that it doesn't offer as much security as client/server networks, and it can be difficult to find files that are stored on many different computers. Windows XP Home is designed for use in small home and office peer-to-peer networks.
- **Client/Server Network:** In a client/server network, everyone stores their files on a central computer called a server. Everyone on the network can access the files stored on the server. Client/server networks are more secure, easier to administer, and much more powerful than peer-to-peer networks. That's why they are used to connect computers in most businesses. The types of computers that can be used as servers include mainframe computers, minicomputers and powerful PC, Macintosh, or UNIX computers. Clients can use PCs, Macintosh computers, handheld devices, etc.

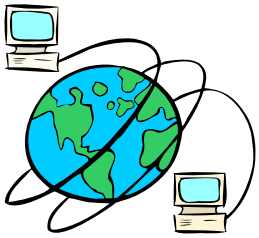
  The disadvantages of client/server networks are that they require special, expensive software, such as Windows 2003 Server or NetWare, and they are more complicated to install and configure than peer-to-peer networks. Windows XP Professional is designed for use in larger client/server networks.

And, if that weren't enough, there are two basic ways that you can connect to a network:

- **Ethernet:** An Ethernet network lets you connect computers in the same geographic area or building using cables. Its high speed, reliability, and simplicity have made Ethernet easily the most popular way to connect computers and devices in a network.
- **Wireless or WiFi:** A wireless, or *WiFi* (stands for *wireless fidelity*) network lets you connect computers anywhere in your home or office without wires. A wireless network uses the same technology found in cordless phones and allows computers to "talk" to each other through radio waves.



A Local Area Network (LAN) connects computers in the same building or facility.



A Wide Area Network (WAN) connects computers over wide geographic areas. The Internet is an example of a WAN.

Quick Reference

Network Benefits:

- Share information
- Share equipment
- Use network software

Network Distribution:

- Local Area Network (LAN)
- Wide Area Network (WAN)

Basic Types of Networks:

- Peer-to-peer
- Client/server

Basic Network Connection Types:

- Ethernet
- Wireless or WiFi

Lesson 1-2: A Look at Common Network Hardware

Figure 1-4

The network shown here contains the most common components that you will find on a small network.

Figure 1-5

What you'll need to set up a small Ethernet network.

Figure 1-6

What you'll need to set up a small wireless or WiFi network.

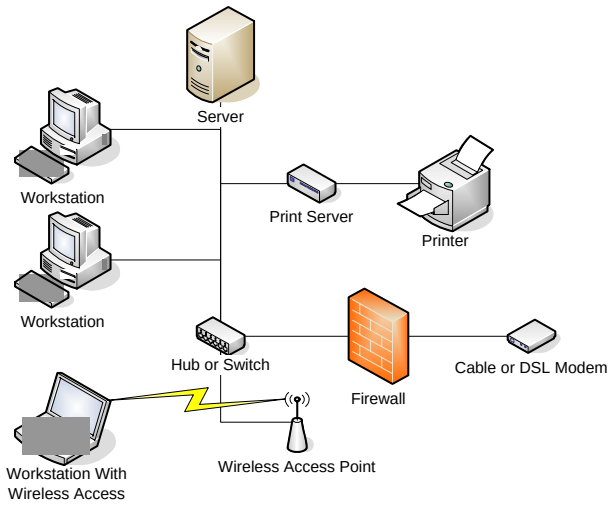


Figure 1-4

Ethernet Shopping List

- Network Interface Cards
- Network Hub or Switch
- Ethernet CAT-5 Cable
- Cable or DSL Modem

Figure 1-5

WiFi Shopping List

- WiFi Network Cards
- Wireless Access Point or Router
- Cable or DSL Modem

Figure 1-6

IC3

Objective: 3.1.1.1

Req. File: None

So you've decided you want to set up a small home network to share your printer, files, and Internet access? Great—let's go shopping! The biggest networking decision you will have to make is if you want an Ethernet-based network or a wireless (WiFi) one. Both have their own set of pros and cons, which we'll cover in detail a little later. This lesson will give you a broad overview of the most common network devices, or nodes, and terms that you may come across.

Table 1-1: Common Home Network Hardware Devices

Network Device	*Description*
Workstation	Workstations are simply the computers that are connected to the network that everyone uses.
Server	A server is a central computer where users on the network can save their files and information. Servers are dedicated to network use and are normally not used to run applications or browse the Internet—and therefore you normally won't find a server in most home networks!
Cable or DSL Modem	A modem connects computers to the Internet through an existing phone line or cable connection. Cable modems and DSL modems are both very fast and can connect entire networks to the Internet.

© 2005 CustomGuide, Inc.

	Network Device	Description
	Firewall	A firewall is a system that prevents unauthorized access to or from a network. Firewalls can be hardware or software based, or a combination of both. Firewalls are often built-in to other products; for example, many cable or DSL modems may come with their own built-in firewall. Windows XP also comes with a software-based firewall.
Wired Ethernet Network	Hub or Switch	A hub is a device where all the cables on a network connect, similar to an electrical surge protector. A switch is an "intelligent hub" and manages network traffic, ensuring that information gets to the correct destination.
Wired Ethernet Network	Ethernet Cable	An Ethernet cable is the wire that physically connects the computers, printers, and other equipment on a network. When you buy an Ethernet cable make sure that it's CAT-5.
Wired Ethernet Network	PCI Desktop Network Adapter	A network interface card (NIC) is a device that physically connects each computer to the network and allows your computer to "talk" to other computers and devices on the network. Most desktop computers already have a built-in network adapter, but if yours doesn't you can install a PCI network adapter.
Wired Ethernet Network	PCMCIA Notebook Network Adapter	A network interface card (NIC) is a device that physically connects each computer to the network and allows your computer to "talk" to other computers and devices on the network. Most notebook computers already have a built-in network adapter, but if yours doesn't, you can install a PCMCIA network adapter.
Wired Ethernet Network	Print Server	A print server lets you connect a printer directly to a network instead of a computer so that everyone on the network can use it.
Wireless / WiFi Network	Wireless Access Point	A wireless access point normally plugs into a wired Ethernet network and acts as the network's "radio station", broadcasting and receiving information to WiFi-enabled computers and devices on the network. Most wireless access points create a 100-foot diameter *hotspot* where computers can connect to the wireless network.
Wireless / WiFi Network	Wireless Router	Very useful if you are setting up a wireless network from scratch, a wireless router is a single device that contains: 1) A port to connect to a cable or DSL modem, 2) a firewall, 3) an Ethernet hub, 4) a router, and of course, 5) a wireless access point.
Wireless / WiFi Network	PCI Desktop WiFi Adapter	Although desktop computers usually come with a built-in Ethernet card, they almost never come with built-in WiFi capability, so you'll almost certainly have to buy and install a PCI WiFi adapter if you want to connect a desktop computer to a wireless network.
Wireless / WiFi Network	PCMCIA Notebook WiFi Adapter	Many notebook computers already have a built-in WiFi adapter, but if yours doesn't you can install a PCMCIA WiFi adapter.
Wireless / WiFi Network	WiFi Print Server	A WiFi print server lets you connect a printer directly to a network without cables so that everyone on the network can use it.

Photos courtesy of LinkSys, a Division of Cisco Systems, Inc.

Quick Reference

Hardware Requirements for an Ethernet Network:

- Network Interface Cards
- Network Hub or Switch
- Ethernet CAT-5 Cable
- Cable or DSL Modem

Requirements for an Wireless or WiFi Network:

- WiFi Network Cards
- Wireless Access Point or Router
- Cable or DSL Modem

Lesson 1-3: Intranets, Extranets, and Security on a Network

Figure 1-7

An Intranet is a miniature version of the Internet that works within a company or organization.

Figure 1-8

An Extranet is also like a miniature version of the Internet, but Extranets are accessible to authorized users outside of a company or organization.

IC3

Objective: 3.1.1.2, 3.1.1.5, and 3.1.1.6

Req. File: None

Figure 1-7

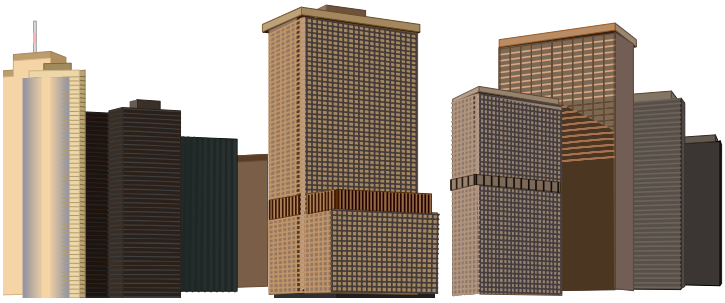


Figure 1-8

An *Intranet* is a miniature version of the Internet that works within a company or organization. Web sites on an Intranet look and act just like any other Web sites, but can only be viewed by users within the company or organization. A *firewall* surrounds the Intranet and fends off unauthorized access.

An *Extranet* is similar to an Intranet, but while an Intranet is generally only accessible to users within same company or organization, an Extranet is accessible by authorized outside users. Business partners use Extranets to share information.

Like the Internet itself, Intranets and Extranets are used to share information. Secure Intranets are now the fastest-growing segment of the Internet because they are much less expensive to build and manage than private networks based on proprietary protocols.

© 2005 CustomGuide, Inc.

So what are the advantages of Intranets and Extranets? Both Intranets and Extranets can:

- **Share Information:** Intranets and Extranets offer a very simple and inexpensive way to make internal company documents, such as a phone directory, available to employees.
- **Connect Documents:** Documents on an Intranet or Extranet can be connected by hyperlinks, so users can easily jump from one related document to another.
- **Use Special Software:** Some software can only be used on an Intranet or Extranet, such as Web based e-mail programs.

Working in a network environment isn't always fun and games, however; there are some important risks you need to consider and be aware of:

- **Potential loss of autonomy, privacy, and security:** The costs of connecting to a network are much greater than a standalone system.
- **Potential of network-wide systems failure:** This can result in a loss of access to network resources, such as network drives or modems.
- **Vulnerability to a network virus attack:** Because of the vast amounts of information being sent back and forth on a network, your chances for suffering a virus or hacking attack are much greater.

The risks of networks are managed through careful procedures performed by network administrators and other security personnel. A new user will be granted access to the network only after a network administrator has set up and authorized a login and password account. When a user properly logs on to the network, their login and password is authenticated against a list of known users.

- **Authorization of new users by a network administrator:** In order to be granted access to a network, every user must be authorized and assigned an account by a network administrator.
- **Authentication of users through proper login procedures:** When a user properly logs on to the network, their username and password are authenticated against a list of known users.
- **Protection from external threats using protective technology:** Networks are protected from unauthorized access using hardware and software security systems such as firewalls.
- **Regular monitoring of the network:** Network administrators and security personnel monitor activity on a network to protect against unauthorized access or other security violations.

Quick Reference

Intranet:

- A miniature version of the Internet that works on a network within a company or organization.

Extranet:

- A miniature version of the Internet that allows access to authorized outside users, such as business partners.

Risks Involved in Working in a Network Environment:

- Potential loss of autonomy, privacy, and security.
- Potential of network-wide systems failure.
- Vulnerability to a network virus attack.

Lesson 1-4: Telephones and Networks

Figure 1-9

An internal modem plugs into an expansion slot inside a computer.

Figure 1-10

An external modem plugs into a serial port and sits outside a computer.

Figure 1-11

Most laptops have a built-in modem.

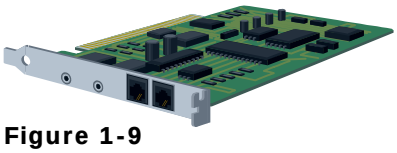


Figure 1-9

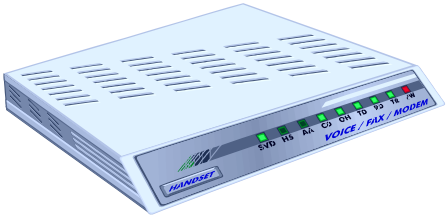


Figure 1-10

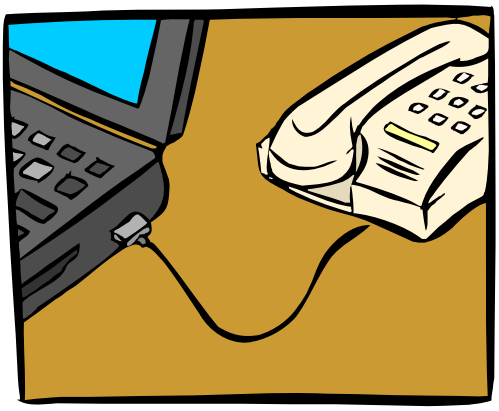


Figure 1-11

IC3

Objective: 3.1.1.1, 3.1.2.1, 3.1.2.2, 3.1.2.3, and 3.1.2.6

Req. File: None

All this mumbo-jumbo regarding networks probably has you a little confused, so let's talk about something we all can understand: the telephone. We all know that telephones can be used to transmit information via voice or fax, but did you know that the telephone can also be used to send and receive data on your computer? That's right—telephones are part of a network, too! The worldwide telephone network is a collection of smaller networks all working together to allow the transmission of various types of information.

A *modem* is a device that translates a computer's ones and zeros into audio tones, so that it can transmit information over the phone lines to other modems. Nearly all digital data now flows over fiber-optic lines, and the *transfer rate* is measured in bits per second (bps), or baud. For example, a 300-baud modem can transmit 300 bits per second. The most common way people use modems is to connect to the Internet. Common rates for regular modems are 28.8Kbps, 33.6Kbps, and 56Kbps where the K stands for thousand. By the way, modem stands for ***mod**ulator-**dem**odulator*.

Modems come in two basic flavors:

- **Analog Modems:** Computers store information digitally, while telephone lines transmit conversations and sounds. An analog modem converts a computer's ones and zeros to tones than can then be transmitted over standard phone lines. Analog modems are limited to speeds of 56Kbps.
- **Digital Modems:** Use binary ones and zeros to transmit data like a computer. Digital modems can transmit information much faster than analog modems. Digital modems are often referred to as *broadband* modems.

Another important term to familiarize yourself with is *bandwidth*. Bandwidth refers to the amount of data that can be passed along a communications channel in a given period of time. "High bandwidth" Internet connections include cable modem, DSL, and T1. "Low bandwidth" Internet connections include dial-up via telephone modem.

Table 1-2: *Modem Types and Speeds* describes the most common analog ("low bandwidth") and digital ("high bandwidth") modems out there. The options that are used primarily by large organizations are T1 and ADSL, and the options used primarily by home users are telephone modem and cable modem.

© 2005 CustomGuide, Inc.

Table 1-2: Modem Types and Speeds

	Type	Speed (in bps)	Description
Analog	PSTN, PSDN, Telephone	56K or less	PSTN stands for *Public Switched Telephone Network*, and is nothing more than your everyday, ordinary telephone system based on copper wires. PSTN is often referred to as POTS, or plain old telephone service. PSDN stands for *Public Switched Data Network* and is just another technical term for the telephone system in use today.
Digital, Broadband	ISDN	56K to 128K	ISDN stands for *Integrated Services Digital Network*. It's one of the older broadband connections. It's only twice as fast as a traditional modem and pretty much obsolete.
	T1	1.544M	A T1 line can carry roughly 60 times more data and is much more reliable than a traditional modem. A T1 line is a dedicated connection, meaning it is permanently connected to the Internet. T1 lines are expensive and are generally used only by companies whose business is built around the Internet or need to transmit massive amounts of data.
	ADSL, DSL	256K to 8,000K	ADSL (*Asymmetric Digital Subscriber Line*) modems take advantage of unused frequencies in the phone line, such as a pause in conversation. DSL modems are very fast; the problem is that you have to be close to a phone company in order to get DSL service.
	Cable	640K to 4,000K	A cable modem is the fastest modem you can buy for home use. The problem is your cable company has to offer cable Internet access in order to use it.

Quick Reference

Analog Modem:

- Converts a computer's ones and zeros to tones that can then be transmitted over standard phone lines. Analog modems are limited to speeds of 56Kbps.

Digital Modem:

- Uses binary ones and zeros to transmit data like a computer. Digital modems can transmit information much faster than analog modems.

PSTN, PSDN:

- Ordinary, everyday telephone network, limited to 56Kbps.

ISDN:

- An older broadband connection, twice as fast as a traditional modem at 128Kbps.

T1:

- 60 times as fast as a traditional modem at 1.544Mbps.

ASDL, DSL:

- Fast digital connection with speeds up to 8,000Kbps.

Cable:

- Fast digital connection with speeds up to 4,000Kbps.

Lesson 1-5: The Internet

Figure 1-12

The Internet, like a telephone network, is actually a collection of smaller networks all communicating and working together.

Figure 1-13

Web pages are stored on Web servers—computers that are permanently connected to the Internet.

Figure 1-12

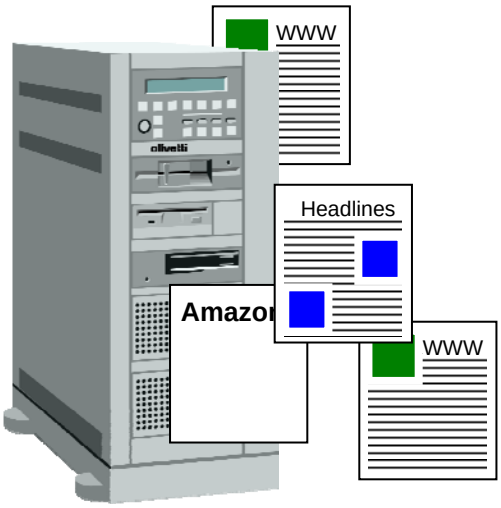


Figure 1-13

IC3

Objective: 3.1.2.4, 3.1.2.5, and 3.1.2.7

Req. File: None

The Internet is the largest computer network in the world. It is often referred to as a "super network," consisting of millions of computers all over the planet, all connected to each other.

The Internet was born in the 1960s when the United States military worried that a nuclear bomb could destroy its computer systems (there weren't many of them back then). So it placed several computers far apart from each other and connected them with some super-fast telephone lines so that the computers could talk to each other. If a nuclear bomb blew up one computer, another computer could instantly take over; thus, the computer network wouldn't go down. Years passed and other organizations, such as colleges and universities, started connecting their computers to this growing network to share information.

Although the Internet has been around a long time, it wasn't until 1989 that Tim Berners-Lee thought of a wonderful idea called the *World Wide Web*. Many people use the terms Internet and World Wide Web or Web interchangeably, but in fact the terms are two separate, but related, things. The Internet is a massive network of networks that connects millions of computers to one another. A good analogy would be the cables that provide cable television. The World Wide Web is simply one way to communicate and share information over the Internet. Using our cable television analogy, the World Wide Web would simply be a single channel that is broadcast over the cable system.

The World Wide Web consists of millions of documents that are stored on hundreds of thousands of computers that are always connected to the Internet. These documents are called *Web pages*, and you can find Web pages on every subject imaginable—from your local newspaper to online catalogs to airline schedules, and much, much more.

Web pages are stored on *Web servers*. A Web server is a computer, not unlike your own computer, only bigger and faster. There are hundreds of thousands of Web servers located all over the world. Web servers are always connected to the Internet so that people can view their Web pages 24 hours a day.

In order to connect to the Internet, you must first make sure you have all the necessary hardware and software. First and foremost, you must have a machine that has the ability to

© 2005 CustomGuide, Inc.

connect to the Internet. Computers, handheld devices (such as PDAs), and wireless devices (such as cell phones) all have the ability to connect to the Internet.

Various types of hardware and software required to connect to the Internet include:

- A modem for accessing a network via telephone lines.
- Ethernet connectors and cables for direct network connection, or wireless connection devices for wireless network connection.
- Telecommunication software and network operating system software that allows client devices and telecommunication devices (such as modems) to communicate with a network.

Once all necessary components are installed, a computer can connect to the Internet via the "onramp" of a smaller computer network. For example, a computer user at a small company could gain access to the Internet via the company LAN.

Another way to gain access to the Internet is via an Internet Service Provider. ISPs provide an "onramp" to the Internet by maintaining hardware and software and a constant connection to the Internet. The responsibility of an ISP includes maintaing and supporting equipment, providing customer service and support, and protecting the network from threats and unauthorized access.

So what can you do once you're connected to the Internet? Plenty. Table 1-3: *What Can I do on the Internet?* shows just a few of the many things there are to do on the Internet.

Table 1-3: What Can I do on the Internet?

Task	*Description*
Send and Receive E-mail	Exchanging electronic mail (or e-mail) is the most used and most popular feature on the Internet. Just like regular paper mail, you can send and receive e-mail with people around the world, as long as they have access to a computer and the Internet. Unlike regular paper mail, e-mail is usually delivered to its destination almost instantly.
Browse the World Wide Web	The World Wide Web is what most people think of when they think of the Internet—although it's really only a part of the Internet. The World Wide Web is an enormous collection of interconnected documents stored on Web servers all over the world. The World Wide Web has information on every subject imaginable.
Join online discussions with newsgroups	Newsgroups are discussion groups on the Internet that you can join to read and post messages to and from people with similar interests. There are thousands of newsgroups on topics such as computers, education, romance, hobbies, politics, religion, and more.
Chat with other online users	Chatting lets you communicate with people on the Internet instantly—no matter how far away they are! Most chats are text-based, meaning you have to type when you converse with people on the Internet. A growing number of chats have voice and even video capabilities—all without having to pay long distance changes.
Download software	You can download pictures, demo programs, patches and drivers for your computer, and many other types of files and save them to your computer.
Listen to music and watch videos	You can listen to sound on the Web, such as radio stations, or music by your favorite artists.

Quick Reference

Internet:

- The Internet is the largest computer network in the world, connecting millions of computers.

World Wide Web:

- A way of accessing information over the Internet.

Internet Service Provider (ISP):

- An ISP provides its users with constant access to the Internet.

Lesson 1-6: Ethernet Networks

Figure 1-14

A diagram of a very simple Ethernet network.

Figure 1-15

Here's what you'll need to set up an Ethernet network.

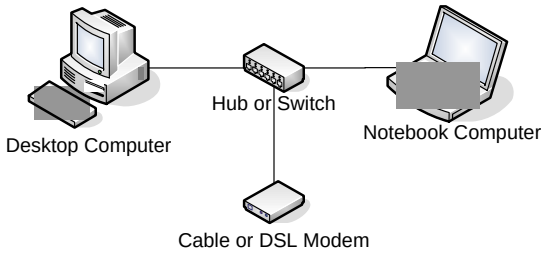


Figure 1-14

Ethernet Shopping List

- Network Interface Cards
- Network Hub or Switch
- Ethernet CAT-5 Cable
- Cable or DSL Modem

Figure 1-15

IC3

Objective: 3.1.2.6

Req. File: None

Developed in the early 1970s (yes, it's really that old!), Ethernet is one of the most simple, reliable, and long-lived networking protocols ever designed. Its high speed, reliability, and simplicity have made Ethernet easily the most common and popular way to connect computers and devices in a network.

To get an idea of how Ethernet works, imagine several people trying to talk in an unmediated meeting. There isn't a schedule of when each person can get a chance to speak; people can simply stand up and talk whenever there is silence in the room. And, if two or more people stand up and talk at the same time, a *collision* occurs. When that happens, both parties sit back down for a very brief, random amount of time, then one of them will stand up and try talking again—hopefully without any interruptions or collisions this time. And, obviously the amount of collisions on a network will increase as more computers and network traffic are added. An Ethernet *switch* can greatly reduce the number of collisions on an Ethernet network by intelligently managing network traffic.

A hub or switch connects all the computers and devices on a network.

Here are some of the basic pros and cons of going with an Ethernet network:

Ethernet Advantages

- **Reliability:** Ethernet has been around for a long, long time and nothing beats it for its dependability.
- **Support:** Most computers—desktops and laptops alike—already have an Ethernet card built right into them!
- **Speed:** Ethernet is fast; most Ethernet networks can transfer information at up to 100 Mbps—usually more than twice as fast as the best wireless networks. And the new Gigabit Ethernet standard can handle a jaw-dropping 1,000 Mbps of network traffic.
- **Security:** Because it doesn't broadcast network information over the airwaves like WiFi, Ethernet is theoretically more secure—someone would have to tap into the network's lines in order to access it (something called the Internet).

A network PCMCIA adapter for a notebook computer.

Ethernet Disadvantages

- **Wires, wires, wires:** The computers in an Ethernet network must be physically connected by cables that resemble a fat telephone cord. It's not a big deal if you want to connect two computers that are sitting right next to each other, but it is a pain to run all that Ethernet cable if you want to connect a computer in your office upstairs with another computer in the basement.

© 2005 CustomGuide, Inc.

What You Need to Create an Ethernet Network

Besides the rather obvious and most important part of the network, which are the actual computers, you'll need a few things to create a small Ethernet network, including:

- **Network Hub or Switch:** A hub is a device where all the cables on a network connect, similar to an electrical surge protector. A switch is an "intelligent hub" that manages network traffic, ensuring that information gets to the correct destination.
- **Ethernet Cable:** An Ethernet cable is the wire that physically connects the computers, printers, and other equipment on a network. When you buy an Ethernet cable make sure that it's CAT-5.
- **Ethernet Network Interface Cards:** A network interface card (NIC) is a device that physically connects each computer to the network and allows your computer to talk to other computers and devices on the network. Most computers already come with a network adapter built-in, but if yours doesn't you can install one; a PCI network adapter for desktops or a PCMCIA network card adapter for laptops.
- **Cable Modem or DSL Modem (Optional):** A modem connects computers to the Internet through an existing phone line or cable connection. Cable modems and DSL modems are both very fast and can connect all the computers in a home or small office network to the Internet. If you subscribe to a high-speed Internet service they will almost certainly set up the cable modem or DSL modem for you.

A network PCI adapter for a desktop computer.

Photos courtesy of LinkSys, a Division of Cisco Systems, Inc.

Ethernet devices are available in a number of speeds (although the vast majority uses the 100 Base-T standard). The following table describes common Ethernet speeds.

Table 1-4: Ethernet Speeds

Standard	*Speed*	*Description*
10 Base-T	10 Mbps	Ten years ago, 10 Base-T was the standard speed of most Ethernet networks, but it's all but obsolete now. You may still find 10 Base-T Ethernet on older network devices, or on devices that simply don't require any more bandwidth, like a cable or DSL modem.
100 Base-T (Fast Ethernet)	100 Mbps	100 Base-T Ethernet is by far the most common Ethernet standard in use. It's fast—ten times faster than 10 Base-T, yet it can still communicate with 10 Base-T network devices; at only 10 Mbps, however.
Gigabit Ethernet	1,000 Mbps	Gigabit Ethernet is a new Ethernet standard that works just like 10 Base-T Ethernet, only ten times faster. Gigabit Ethernet can still talk to 100 Base-T and even 10 Base-T network devices. Because it's so new, Gigabit Ethernet devices are still quite expensive.

Quick Reference

Ethernet Advantages:

- Reliability
- Widely supported
- Speed
- Security

Ethernet Disadvantages:

- Wiring can be difficult to set up.

Common Ethernet Speeds:

- 10 Mbps (10 Base-T)
- 100 Mbps (100 Base-T)
- 1,000 Mbps (Gigabit)

Lesson 1-7: Wireless Networks

Figure 1-16

A diagram of a very simple wireless or WiFi network.

Figure 1-17

Here's what you'll need to set up a WiFi network.

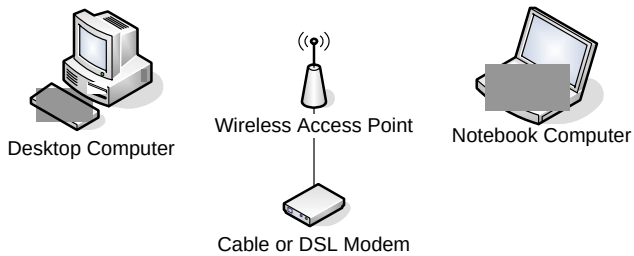


Figure 1-16

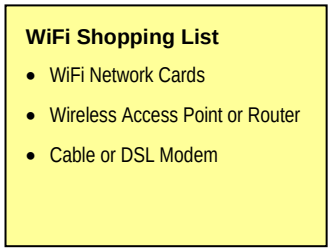


Figure 1-17

IC3

Objective: 3.1.1.1 and 3.1.2.6

Req. File: None

One of the hottest new technologies in the computer world is wireless networking or *WiFi*, which lets you connect computers without any wires. Wireless networks allow computers to "talk" to each other by broadcasting and receiving radio waves. Wireless networks are often simply part of a larger, Ethernet network.

Of course, WiFi networking has its own set of pros and cons:

Wireless Networking Advantages

- **Simplicity:** Wireless networks are often very simple to set up because there aren't any messy wires involved.
- **Public Availability:** If you have a laptop with WiFi capability you can browse the Internet and check your e-mail from thousands of wireless hotspots in coffee shops, airports, and hotels.
- **Convenience:** Wireless networks are downright cool—nothing is more amazing than browsing the Web on your laptop while you're sitting in the living room in front of the television or outside on the porch.

Wireless routers and access points broadcast and receive network information.

Wireless Networking Disadvantages

- **Security:** …or lack thereof. WiFi broadcasts information just like a radio transmitter, so it can be easy for an unauthorized computer to listen in and gain access to your network. There are a number of ways to secure a wireless network; the problem is that many people simply don't know how to do it.
- **Interference:** A wireless network shares the same crowded frequency as other wireless networks—and cordless phones too! All those devices can cause a lot of interference and as a result many wireless networks are quite unreliable.

A wireless network (WiFi) PCMCIA adapter for a notebook computer.

Hotspots and Access Points

You can find wireless network *hotspots* that let you browse the Internet and check your e-mail in many places outside the home or office. A hotspot is a place where you can connect to a wireless network. There are many wireless hotspots now available in such places as restaurants, hotels, coffee shops and airports.

Wireless Security

Wireless network hotspots can be open or secure. If a hotspot is open, then anyone with a wireless network card can access the hotspot. If the hotspot is secure, then the user will usually need to know the *WEP* key to connect to it. WEP stands for Wired Equivalent Privacy, and it is a way to encrypt the information that a wireless network sends through the air. There are two variations of WEP: 64-bit encryption (really 40-bit) and 128-bit encryption (really

© 2005 CustomGuide, Inc.

104-bit). 40-bit encryption was the original standard but it was easily broken. 128-bit encryption is more secure and is what most wireless networks use.

What You Need to Add a Wireless Hotspot to an Existing Network

If you already have several computers connected by an Ethernet network you can easily add a WiFi hotspot to the mix. Here's what you'll need:

- **Wireless Access Point:** A wireless access point normally plugs into a wired Ethernet network and acts as the network's "radio station", broadcasting and receiving information to and from WiFi-enabled computers and devices on the network. Try to get an access point that uses the 802.11g wireless standard, described in Table 1-5: *WiFi Network Standards*.
- **Wireless Network (WiFi) Cards:** Any computers you want to connect to a wireless network must have a wireless network or WiFi card. WiFi is already built in to many newer laptops. If your laptop doesn't have WiFi you can buy a PCMCIA card or an external USB port adapter. For desktop computers, you'll need a PCI card that you install inside the machine, or a external USB port adapter. Try to get cards that use the 802.11g wireless standard, described in Table 1-5: *WiFi Network Standards*.

In a typical home or office, your new hotspot will cover about 100 feet in all directions, although walls and floors do dramatically reduce this range.

What You Need to Create a Wireless Network from Scratch

Even if you're starting at the very beginning, there's no need to get discouraged. Here's what you'll need:

- **Wireless Access Point or Wireless Router:** If you're building a network from scratch you will probably want to use a wireless router instead of a wireless access point. A wireless router is a single device that contains: 1) A port to connect to a cable or DSL modem, 2) a firewall, 3) an Ethernet hub, 4) a router, and of course, 5) a wireless access point.
- **Wireless Network (WiFi) Cards:** Once again, any computers you want to connect to a wireless network must have WiFi networking cards or adapters installed.
- **Cable Modem or DSL Modem (Optional):** A modem connects computers to the Internet through an existing phone line or cable connection. Cable modems and DSL modems are both very fast and can connect all the computers in a home or small office network to the Internet. If you subscribe to a high-speed Internet service they will almost certainly set up the cable modem or DSL modem for you.

If wireless networking wasn't complicated enough, there are several different wireless standards out there that you have to be aware of. Table 1-5: *WiFi Network Standards* briefly describes these standards.

Table 1-5: WiFi Network Standards

Standard	*Speed*	*Range*	*Description*
802.11b	10 Mbps	150 feet	802.11b was the first version to reach the market. It is the most common, inexpensive, and, at only 10 Mbps, the slowest of all wireless standards.
802.11a	54 Mbps	100 feet	802.11a was a short-lived standard that was much faster (54 Mbps) than 802.11b but had a shorter range. 802.11a is incompatible with the 802.11b standard, so don't expect to find it in your local coffee shop.

A wireless network (WiFi) PCI adapter for a desktop computer.

Photos courtesy of LinkSys, a Division of Cisco Systems, Inc.

Quick Reference

Wireless Networking Advantages:

- Simple to set up
- Public availability
- Convenient to use

Wireless Networking Disadvantages:

- More security issues and problems.
- Interference and reliability problems.

Wireless (WiFi) Standards

- 802.11b
  Speed: 10 Mbps
  Range: 150 feet
  Availability: Very common
- 802.11a
  Speed: 54 Mbps
  Range: 100 feet
  Availability: Rare
- 802.11g
  Speed: 54 Mbps
  Range: 150 feet
  Availability: Common – also compatible with the more common 802.11b standard.

Standard	*Speed*	*Range*	*Description*
802.11g	54 Mbps	150 feet	802.11g combines the best of both worlds: It has the range of 802.11b and the speed of 802.11a. Best of all, 802.11g is fully compatible with the very common 802.11b standard. If you get any wireless network equipment make sure it conforms to the 802.11g wireless standard.

© 2005 CustomGuide, Inc.

Chapter One Review

Lesson Summary

Introduction to Networks

- Network Benefits: The ability to share information, share equipment, and use network software.
- LAN: Stands for *Local Area Network* and connects computers in the same geographic area or building, using cables.
- WAN: Stands for *Wide Area Network* and connects computers across a large geographic area.
- Peer-to-Peer/Workgroup: Files and resources are shared on every computer. Easier to setup but very insecure.
- Client/Server Network: Files are stored on a single central computer, or server. More secure and expensive.

A Look at Common Network Hardware

- The four basic hardware requirements for an Ethernet network are network interface cards, a network hub or switch, an Ethernet CAT-5 cable, and a cable or DSL modem.
- The three basic hardware requirements for a wireless or WiFi network are WiFi network cards, a wireless access point or router, and a cable or DSL modem.

Intranets and Extranets

- Intranet: A miniature version of the Internet that works on a network within a company or organization.
- Extranet: A miniature version of the Internet that allows access to authorized outside users, such as business partners.
- Risks Involved in Working in a Network Environment: The potential loss of autonomy, privacy, and security; the potential of network-wide systems failure; and vulnerability to a network virus attack.

Telephones and Networks

- An analog modem converts a computer's ones and zeros to tones that can then be transmitted over standard phone lines. Analog modems are limited to speeds of 56Kbps.
- A digital modem uses binary ones and zeros to transmit data like a computer. Digital modems can transmit information much faster than analog modems.
- Bandwidth refers to the amount of data that can be passed along in a given period of time.
- PSTN, PSDN: Ordinary, everyday telephone network, limited to 56Kbps.
- ISDN: An older broadband connection, twice as fast as a traditional modem at 128Kbps.
- T1: 60 times as fast as a traditional modem at 1.544Mbps.
- ASDL, DSL: Fast digital connection with speeds up to 8,000Kbps.

- Cable: Fast digital connection with speeds up to 4,000Kbps.

The Internet

- Internet: The Internet is the largest computer network in the world and connects millions of computers.
- World Wide Web: A way of accessing information over the Internet.
- Internet Service Provider (ISP): An ISP provides its users with constant access to the Internet.

Ethernet Networks

- The four main advantages of Ethernet networks are reliability, support, speed, and security. One disadvantage is that the wiring can be difficult to set up.
- The three most common Ethernet speeds are 10 Mbps (10 Base-T), 100 Mbps (100 Base-T), and 1,000 Mbps (Gigabit).

Wireless Networks

- The three main advantages of wireless networking are simplicity, public availability, and convenience. Two disadvantages are security and interference/reliability.
- Three wireless network standards are 802.11b (Speed: 10 Mbps, Range: 150 ft., Availability: Very common), 802.11a (Speed: 54 Mbps, Range: 100 ft., Availability: Rare), and 802.11g (Speed: 54 Mbps, Range: 150 ft., Availability: Common—also compatible with the more common 802.11b standard).

Quiz

1. Which of the following is NOT a benefit of networking?

A. The ability to share equipment.
B. The ability to broadcast information over the Internet.
C. The ability to use network software.
D. The ability to share information.

2. A WAN connects computers in the same building or facility. (True or False?)

3. What does LAN stand for?

A. Linked Area Network
B. Lots of Anarchy and Nonsense
C. Local Area Network
D. Linked Applications Node

4. An *Intranet* is a miniature version of the Internet that works on a network within a company or organization. (True or False?)

© 2005 CustomGuide, Inc.

5. The following are all types of computers that can be used as servers, except:

A. Minicomputers
B. UNIX computers
C. Mainframe computers
D. Handheld computers

6. Which of the following modems is the slowest?

A. ISDN
B. DSL
C. Cable
D. Telephone

7. All users on a network must be authorized by a network administrator. (True or False?)

8. Which one of the following is NOT used to measure data transmission rates?

A. MPH
B. Kbps
C. Mbps
D. Bits per second

9. The Internet is a relatively small computer network, consisting of hundreds of smaller computer networks. (True or False?)

10. Which of the following are examples of "high bandwidth" Internet connections?

A. Cable modem
B. Telephone
C. T1
D. DSL

Quiz Answers

1. False. A WAN connects computers over wide geographic areas.

2. B. The ability to broadcast information over the Internet is not a benefit of networking. It's not even a component!

3. C. LAN stands for Local Area Network.

4. True. An *Intranet* is a miniature version of the Internet that works on a network within a company or organization.

5. D. Handheld computers cannot be used as servers.

6. D. A telephone dial-up modem is much slower than the other digital modems.

7. True. A network administrator is responsible for keeping a network safe and secure for all users.

8. A. MPH stands for miles per hour, and has nothing to do with data transmission rates.

9. False. The Internet is the largest computer network in the world, connecting millions of computers.
10. A, C, and D are all examples of “high bandwidth” Internet connections.

© 2005 CustomGuide, Inc.

Chapter Two: Electronic Mail

Chapter Objectives:

- **Understand e-mail and e-mail addresses**
- **Compose and send e-mail**
- **Open and close an e-mail message**
- **Reply to and forward a message**
- **Find and sort messages**
- **Work with attachments**
- **Use folders**
- **Select one or more mail messages**
- **Delete messages**
- **Marking and flagging messages**
- **Saving messages to the hard drive**
- **Backing up and archiving mail**
- **Work with the address book**
- **Understand network etiquette, Spam, and viruses**

☑ Prerequisites

- A computer with Outlook 2000 installed.
- An understanding of basic computer functions (how to use the mouse and keyboard).
- How to start Microsoft Outlook and use the Outlook bar.
- How to use menus, toolbars, and dialog boxes.

Unless you've been hiding out in a cave for the past ten years, you already know that e-mail lets you send electronic messages to the staff at the office or to people all over the world. You probably also already know e-mail is fast (usually instantaneous) and economical (many e-mail accounts are completely free). The application that you will be using in this chapter is Microsoft Outlook 2000, but there are many, many other e-mail programs available.

This chapter will teach you the basics of using an e-mail application. You will learn what the different Outlook tools are and how they can make you more productive and organized. You will learn how to compose and send an e-mail message, find and organize messages, add an address to the Contacts list, and much more. Are you ready? Then let's get started!

Lesson 2-1: Understanding E-mail and E-mail Addresses

Figure 2-1
An e-mail address consists of a User name, Domain Name, and a Top Level Domain (TLD).

IC3

Objective: 3.2.1.1, 3.2.1.3, 3.2.1.5, and 3.2.1.6

Req. File: None

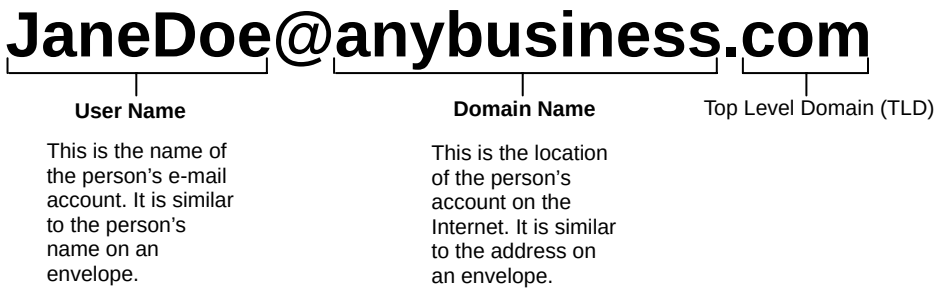


Figure 2-1

Electronic mail can be accessed in many ways, including via electronic mail software such as Microsoft Outlook, Eudora, or America Online; via web-based systems such as Hotmail; via integrated applications such as Lotus Notes; and via cell phone or other wireless device.

Microsoft Outlook is a messaging and personal information manager, or PIM. Outlook lets you send and receive e-mail messages, schedule appointments, and organize your contacts and addresses. It also reminds you of tasks you need to complete. For many people, Outlook is often the least-used Microsoft Office application—unless you're part of a large organization, in which case Outlook may be your most-frequently used application.

Within an organization's internal network, electronic mail messages are routed from one user to another user via network servers. In order to send mail to the correct recipient, the local electronic mail software must know who is who on the network. For example, just like you need to know a person's street address if you want to send them a letter, you need to know a person's e-mail address if you want to send that person an e-mail message. Figure 2-1 is an example of what a typical e-mail address looks like.

E-mail addresses consist of three parts: a User Name, a Domain Name, and a Top Level Domain (TLD).

- **User Name:** The User Name refers to the name of the person's e-mail account. It is similar to the person's name on an envelope.
- **Domain Name:** The Domain Name, also known as the Host Name, refers to the location of the person's account on the Internet. It is similar to the address on an envelope. The User Name and Domain name are separated by the @ symbol.
- **Top Level Domain (TLD):** The TLD falls at the end of an e-mail address and is preceded by a period, or "dot." This refers to the type of organization or country where the person's e-mail account is located. It is similar to the state or country on an envelope.

© 2005 CustomGuide, Inc.

That's all there is to an e-mail address. Pretty simple stuff, huh? It is also important to remember that e-mail isn't the only way to send electronic messages. Other popular messaging systems include paging or Instant Messaging/Text Messaging delivered via computers, cell phones, and wireless devices.

Move on to the next lesson to learn how to compose and send e-mail. But first, go ahead and take a look at the following table for some examples of commonly used Top Level Domains.

Table 2-1: Examples of Commonly Used Top Level Domains

TLD	*Description*
.biz	Reserved for businesses only
.com	This is the most common Top Level Domain and it is reserved for commercial enterprises.
.edu	Reserved for educational institutions and universities
.gov	Reserved for United States government agencies
.mil	Reserved for the United States military
.net	This is most often used by Internet Service Providers (ISPs), but it is reserved for any network group.
.org	Reserved for non-profit organizations
.info	Used in all types of domains

Quick Reference

Understanding E-mail Addresses:

- User Name: The User Name refers to the name of the person's e-mail account.
- Domain Name: The Domain Name, also known as the Host Name, refers to the location of the person's account on the Internet.
- Top Level Domain (TLD): The TLD refers to the type of organization, or the country, where the person's e-mail account is located.

Lesson 2-2: Composing and Sending E-mail

Figure 2-2

The New Message Window.

Figure 2-3

The Select Names dialog box.

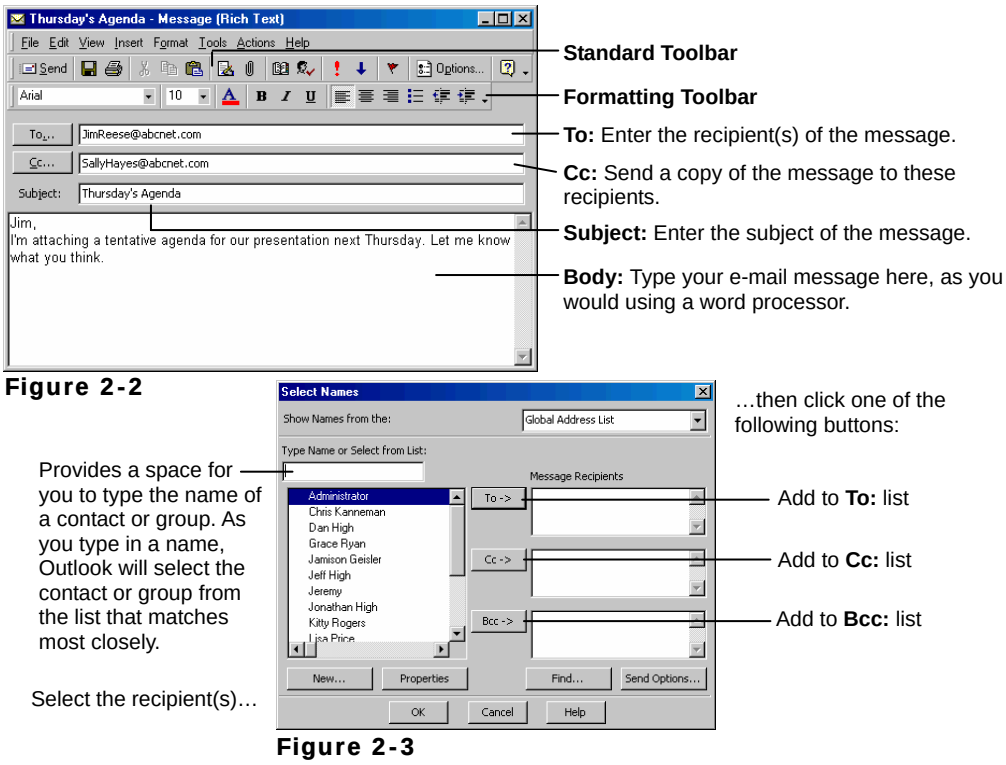


Figure 2-2

Figure 2-3

IC3

Objective: 3.2.1.2, 3.2.2.1, and 3.2.3.4

Req. File: None

This lesson explains the most basic e-mail task of all: how to compose and send an e-mail message.

Before we begin, however, it is important to take note of the fact that sometimes other forms of correspondence are more appropriate than e-mail. Some communication, such as the transmission of legal documents that require a signature, should be sent via traditional delivery methods rather than electronically.

Inbox button

1. **Start the Microsoft Outlook program and make sure you are in the Inbox folder – click the Inbox button on the Outlook Bar if you're not.**

   The Inbox appears.

New Mail Message button

2. **Click the New Mail Message button.**

   An Untitled – Message form appears, as shown in Figure 2-2, ready for you to enter a new message. First, you need to specify the recipient's e-mail address in the To field. There are two ways to do this:

   - If you know the e-mail address, you can type it into the To: box.
   - If you don't know the address, you can click the To: button and select the address from your list of contacts.

   In this exercise, we will send the same message to two people, using both methods. First let's enter a name directly into the To box…

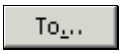
© 2005 CustomGuide, Inc.

3. Type your e-mail address into the To text box.

If you need to send a message to more than one person, simply place a comma (,) between the recipients' e-mail addresses—for example: JohnH@acme.com, BettyT@yahoo.com. Let's send this message to another person, this time using the address book to address the message.

4. Click the To button.

The Select Names dialog box appears, as shown in Figure 2-3.



To button

5. Click the Show Names from the: arrow and select Contacts if necessary.

This will display the names and addresses in the Contacts folder.

6. Click the name of any recipient in the Name list and then click the To button.

If you need to send a message to more than one person, you can repeat Step 6 to add the other recipients. When you're finished, move on to the next step.

Send Message button

7. Click OK.

The Select Recipients dialog box closes, and the recipient(s) appear in the To field.

8. (Optional) To send a copy of a message to someone, click in the Cc field and/or the Bcc field and Repeat Steps 3-7 to enter their e-mail addresses, only click the Cc or Bcc button instead of the To button.

Table 2-2: *Ways to Address an E-mail Message* describes carbon copies (Cc) and Blind Carbon Copies (Bcc). Next, enter the subject of the message so your recipient(s) will know what your message is about. The subject will appear in the heading of the message in the recipient's inbox.

9. Click the Subject field and type `Greetings from Timbuktu!`

Now you can type an actual e-mail message.

10. Click anywhere in the body of the message (in the lower pane) and type: `Hi everyone – just wanted you to know that my vacation in Timbuktu is going great!`

Type the message as you would in a word processor. All the generic Windows commands such as cutting, copying, and pasting text work in Outlook.

11. When you're finished with the message, click the Send Message button on the toolbar.

The message is sent to the Outbox folder and will be sent the next time that you click the Send and Receive button.

12. Click the Send and Receive button on the toolbar.

Outlook sends all the messages that are stored in the Outbox folder and retrieves any new e-mail messages it finds on the e-mail server.

Table 2-2: Ways to Address an E-mail Message

Address	*Description*
To	Sends the message to the recipient you specify (required).
Carbon Copy (Cc)	Sends a copy of the message to a recipient who is not directly involved, but might be interested in the message.
Blind Carbon Copy (Bcc)	Sends a copy of the message to a recipient without anyone else knowing that he or she received the message. You need to select View → Bcc Field from the menu to use the Bcc Field.

Quick Reference

To Compose a Message:

1. Click the Inbox button on the Outlook Bar.
2. Click the New Mail Message on the toolbar.
3. Type the recipient's address in the To field.

   Or…

   Click the To button to the left of the To text box, choose the name of the recipient from the Name list, then click the To button. Click OK when you're finished.
4. Click the Subject text box and enter the message's subject.
5. Click the pointer in the lower pane and type the message.
6. Click the Send button on the toolbar to send the message.

Lesson 2-3: Specifying Message Options

Figure 2-4

The Standard toolbar for a new mail message.

Figure 2-5

The Message Options dialog box lets you specify such options as the message's level of importance and sensitivity.

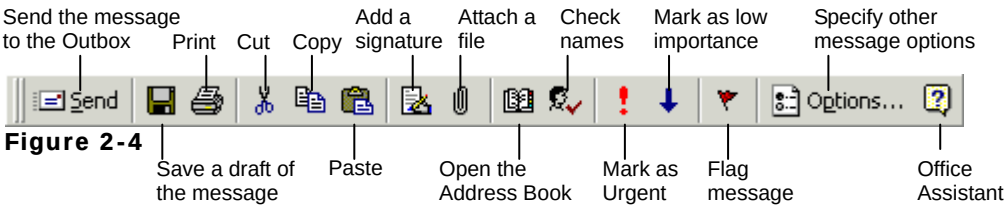


Figure 2-4

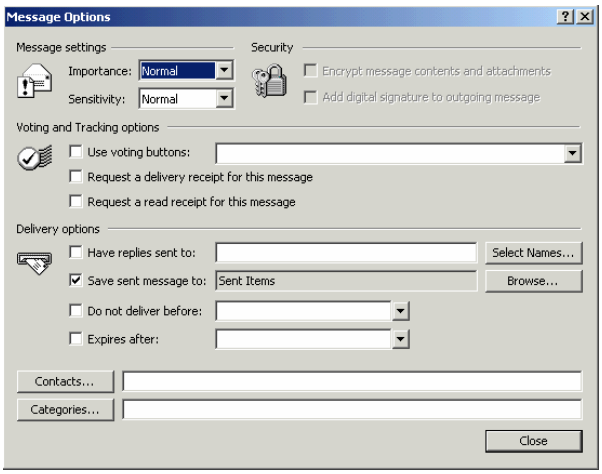


Figure 2-5

IC3

Objective: 3.2.2.6 and 3.2.3.2

Req. File: None

Most of the letters you mail are probably delivered by the postal service and require a first-class stamp. Sometimes you may need to mail a letter or package that requires special delivery options, such as parcel insurance, certification that the letter was received, or overnight delivery. Similarly, you can specify options for your e-mail messages. You can mark messages as urgent, specify a delivery receipt for e-mail messages, or even redirect certain messages to other people.

1. Click the New Mail Message button on the toolbar.

First, let's compose an e-mail message to ourselves…

2. Create the following e-mail message:
TO: (Enter your own e-mail address here.)
Subject: `Help from Timbuktu!`
Body: `Please send money and start trying to get me another passport! I lost my wallet!`

An e-mail message this important needs some special delivery options! To specify options for an e-mail message, click the Options button on the toolbar.

Options button

Other Ways to Change a Message's Options:

- Select View → Options from the menu.

3. Click the Options button on the toolbar.

The Message Options dialog box appears, as shown in Figure 2-5. Table 2-3: *Message Options* describes the various settings you'll see in the Message Options dialog box.

NOTE: If you are using Outlook in an Internet Only environment, some of the options will not appear in the Message Options dialog box.

© 2005 CustomGuide, Inc.

You want to mark this message as urgent, and you want to receive notification of when the message is delivered and when the recipient opens the e-mail to read it. Let's start with marking the message as high importance.

4. Click the Importance list arrow and select High from the list.

Actually, you don't have to open the Message Options dialog box at all to mark a message as urgent. Simply click the Importance: High button on the toolbar instead.

Other Ways to Mark a Message as Urgent:

- Click the Importance: High button on the toolbar.

Next, you want to request both a delivery receipt and a read receipt for the message. Here's the difference bewteen the two:

- **Delivery Receipt:** Outlook will send you notification when the message is successfully delivered to the recpient (which is usually almost instantanous.)
- **Read Receipt:** Outlook will send you notification when the recpient opens and (hopefully) reads the message.

5. Check both the Request a delivery receipt for this message and the Request a read receipt for this message boxes.

Those are all the options we need to this particular e-mail.

6. Click Close to close the Message Options dialog box.

Let's send our urgent message!

7. Click the Send Message button on the toolbar.

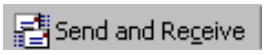
Send button

Other Ways to Send an E-mail:

- Press <Alt> + <S>.

Depending on how Outlook is configured on your computer, you may have to perform the next step to send the e-mail message out immediately.

8. Click the Send and Receive button on the toolbar.



Send and Receive button

Outlook sends all the messages that are stored in the Outbox folder and retrieves any new e-mail messages it finds on the e-mail server.

You can also insert automatic signatures, create out-of-office messages, and even specify mail format. We'll discuss these options later on in the chapter.

Table 2-3: Message Options

Option	*Description*
Importance	Specifies whether the message is of high, normal, or low importance.
Sensitivity	Displays a tag indicating how the recipient should treat the message.
Security	Encodes the message so it is not readable by anyone except the recipients.
Use voting buttons	Allows the sender to tally votes over email.
Tell me when this message has been delivered	Returns a message to you verifying the date and time the message arrived at the post office of the recipient.
Tell me when this message has been read	Returns a message to you verifying the date and time the message was opened by the recipient. This feature can be extremely beneficial, especially if something goes wrong and your messages are not being sent or received.
Have replies sent to	Sends replies to this message to someone else, such as an assistant.
Save sent message to	Saves a copy of the sent message in the specified folder.
Do not deliver before	Keeps the message in your Outbox folder until the date and time you specify.
Expires after	Makes the message unavailable after the specified date and time.

Quick Reference

To Specify Message Options:

1. Click the New Mail Message button on the toolbar and create the message.
2. Click the Options button.
3. Specify the message options and click OK.

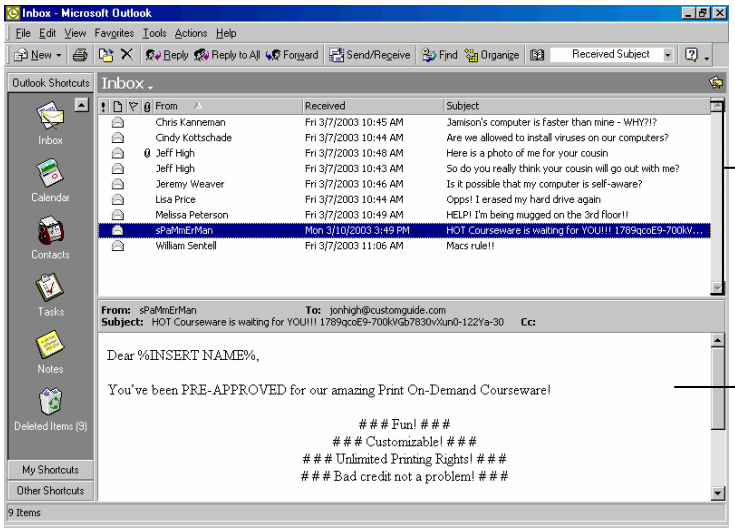
To Mark a Message as Urgent:

- Click the Importance: High button on the toolbar.

Lesson 2-4: Opening and Closing an E-mail Message

Figure 2-6

The Inbox.



This area displays the messages in the highlighted folder. Click or double-click the message you want to read.

Messages that have not been opened appear in **bold** and have a closed envelope ( ). A paper clip ( ) indicates an attached file.

The contents of the selected message appear in this area.

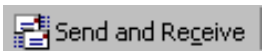
Figure 2-6

IC3

Objective: 3.2.2.1

Req. File: Message created in Lesson 2-2: *Composing and Sending E-mail*.

This lesson explains how to receive and read your e-mail messages in Outlook – and then what you can do to your messages after reading them. You'll find it's a lot easier to retrieve and read e-mail messages than it is to sort through and read postal mail – no envelopes to tear open, and no scribbled handwriting to decipher. Let's get started!



Send and Receive button

Other Ways to Check for New Messages:

- Press <F5> or <Ctrl> + <M>.
- Select Tools → Send and Receive and select your account from the menu.

1. If necessary, click the Inbox button on the Outlook Bar.

The contents of the Inbox folder appear in the upper-right pane of the Outlook window, as shown in Figure 2-6. Let's check and see if you have any new e-mail.

2. Click the Send and Receive button on the Outlook bar.

Normally, Outlook automatically checks your mail server for new messages every 30 minutes. If it finds any new messages on your mail server, it downloads them and saves them to your computer. You can force Outlook to check for new messages by clicking the Send and Receive button. If you connect to the Internet with a modem connection, outlook will automatically dial out and connect to the Internet to establish a connection with your mail server.

Your new messages are saved in the Inbox folder. Any new, unread messages appear in **bold** and have an unopened message icon next to them. Here's how to open and read a message.

3. Click the Greetings from Timbuktu! message you sent yourself earlier.

The contents of the message appear in the lower right-hand pane of the Outlook program screen, and the From and Subject information appear at the top of this pane. You can also open a message in its own window – this is especially helpful when you want to read a long message. Simply double-click the message you want to read.

© 2005 CustomGuide, Inc.

4. Double-click the Greetings from Timbuktu! message.

The message appears in its own window. You can close the message window when you're finished reading it by clicking the window's close button.

5. Close the message window by clicking its Close button.

The message window closes and you return to the Inbox.

Once you have received a message, there are several things that you can do with it. You can select the message and do one or more of the following:

- **Reply to the Message:** When you reply to a message, Outlook opens a Message form that contains the e-mail address, subject, and body of the message you are responding to. To reply to a message, click the Reply button on the toolbar.
- **Forward the Message:** When you forward a message to another recipient, Outlook opens a Message form that contains the subject and body of the message you are forwarding. You must specify to whom you want to forward the message in the To box. To forward a message, click the Forward button on the toolbar.
- **View or Download any Attachments:** Messages with a icon have one or more files attached to them. To view and/or download these files, click the paperclip icon on the message header and select the files you want to open or view.
- **Print the Message:** To print a message, click the Print button on the toolbar.
- **Delete the Message:** To delete a message, press the <Delete> key.
- **Move the Message to a Different Folder:** If you're the type of person who has your desk and filing cabinets neatly organized, you can create your own set of folders and move important messages that you want to save to those folders. We will discuss creating and working with your own folders later.
- **Ignore the Message:** Most people don't do anything with their messages, and let them fill their inbox like a stack of unpaid bills. Having lots of old e-mail messages in your Inbox makes it more difficult to find important messages.

Check out Table 2-4: *Message Icons* for explanation of the icons that appear with your e-mail messages and then move on to the next lesson to learn how to Reply to an e-mail message!

Table 2-4: Message Icons

Icon	*Description*
Unopened Message	This message has not yet been read or opened.
Opened Message	This message has been read (or at least opened).
Reply	You have replied to this message.
Forward	This is a forwarded e-mail message.
Attachment	This message has one or more files attached to it.
! Urgent	This message is marked as urgent—you better look at it fast!
Flagged	This message has been flagged to remind you about something.

Other Ways to Close an E-mail Message:

- Select File → Close from the menu.

Quick Reference

To Receive and Read E-mail Messages:

1. Click the Inbox button on the Outlook bar.
2. Click the Send and Receive button on the toolbar.
3. Click or double-click the message you want to read.

   Or…

   Select File → Open from the menu.

To Close an E-mail Message:

- Click the Message window's Close button.

Or…

- Select File → Close from the menu.

Things you can do with an E-mail Message:

- Reply to the message
- Forward the message
- View or download any attachments
- Print the message
- Delete the message
- Move the message to a different folder
- Ignore the message.

Lesson 2-5: Replying to a Message

Figure 2-7

A reply to a message with a copy of the original message included.

Figure 2-8

Copied information in a Reply.

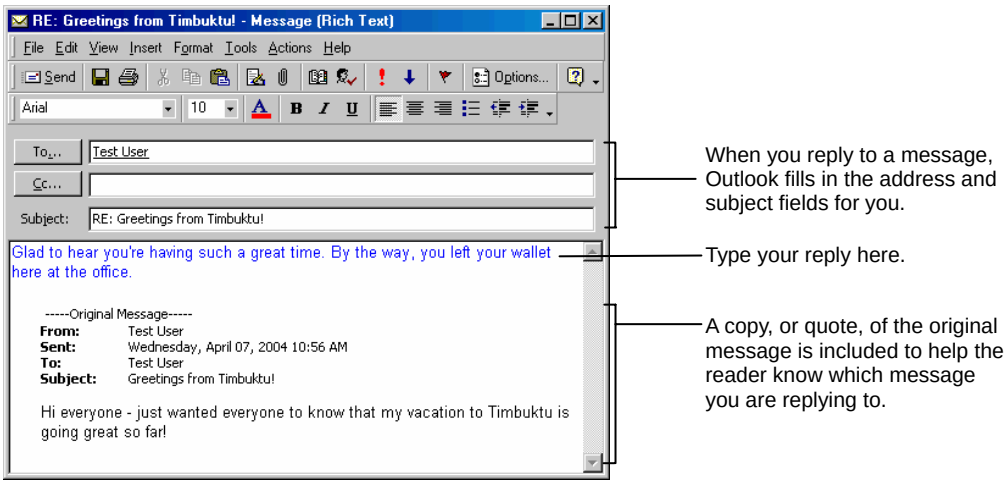


Figure 2-7

Oftentimes, web-based e-mail applications will format copied information in a reply message.

Characters, such as carets, are used to indicate the message is not original.

```
>From: "Big Bird" <Big.Bird@hotmail.com>
>To: Oscar.Grouch@hotmail.com
>Date: Sat, 18 Sep 2004 19:54:29 -0500
>
>Hello Oscar!
>
>How are you? Grover tells me you're a little under the weather.
>Why don't I bring you some warm soup and a couple blankets?
>Your trash can has to be freeeeezing this time of year!
>
>Your friend,
>
>Big Bird
>
```

Figure 2-8

IC3

Objective: 3.2.2.1, 3.2.3.2, and 3.2.3.5

Req. File: Message created in Lesson 2-2: *Composing and Sending E-mail*.

You can reply to an e-mail message just like you would answer a letter. Replying to an e-mail message is incredibly easy—you don't even need to know the person's e-mail address; just click the Reply button, write your response, and Outlook takes care of the rest. Read on to find out how!

Reply button

1. Select the Greetings from Timbuktu! message you sent to yourself earlier.

Next, you need to decide who you want to respond to. You have two choices:

- **Reply:** Sends the reply only to the author of the message.
- **Reply to All:** Sends the reply to everyone who received the message.

Reply to All button

NOTE: Sometimes "Reply to All" can lead to people being sent inappropriate or irrelevant mail messages that can embarrass the sender or inconvenience the recipient(s). If you select this option, make sure *everyone* is applicable.

2. Click the Reply button on the toolbar.

A new Message form appears where you can type your reply. Outlook automatically fills in the recipient's e-mail address and subject line in the new Message form—although you can change this information if you want.

© 2005 CustomGuide, Inc.

Notice that Outlook also includes a copy, or quote, of the original message in order to help the reader know which message you are replying to (see Figure 2-8). This helps track the "history" of the e-mail message, and comes in handy when you are answering a question and want to include the original question in your reply. Most e-mail programs will automatically copy selected information from one e-mail message to the other, but if you don't want to include this information, it's easy to delete it.

3. Select all of the original message text and press the <Delete> key.

The copy of the original message is deleted. You now have a blank Message form. After what we talked about, however, it's probably a good idea to include the original message. Let's undo your last action.

Other Ways to Undo:

- Select Edit → Undo from the menu.

4. Press <Ctrl> + <Z>.

The original message reappears.

Now all you have to do it enter a response to the message.

5. Press <Ctrl> + <Home> to go to the beginning of the message and type `Glad to hear you're having such a great time. By the way, you left your wallet here at the office`**.**

We're ready to send the message.

Send button

Other Ways to Send an E-mail:

- Press <Alt> + <S>.

6. Click the Send button on the toolbar.

The message is sent to the Outbox folder, and will be sent the next time that you click the Send and Receive button.

Actually, some people think replying to an e-mail message is *too* easy. If you don't respond to your e-mail messages, no one will buy your "I received your message but I haven't had time to write back" and "I'm sorry, I somehow misplaced your address" excuses.

Quick Reference

To Reply to a Message:

1. Find and open the message you want to reply to.
2. Click the reply option you want to use:

   Reply sends the reply only to the author of the message.

   Reply to All sends the reply to everyone who received the message.
3. Type your reply and click the Send button on the toolbar when you're finished.

To Delete the Original Message Copy:

- Select the original message text and press the <Delete> key.

Lesson 2-6: Forwarding a Message

Figure 2-9

A forwarded message.

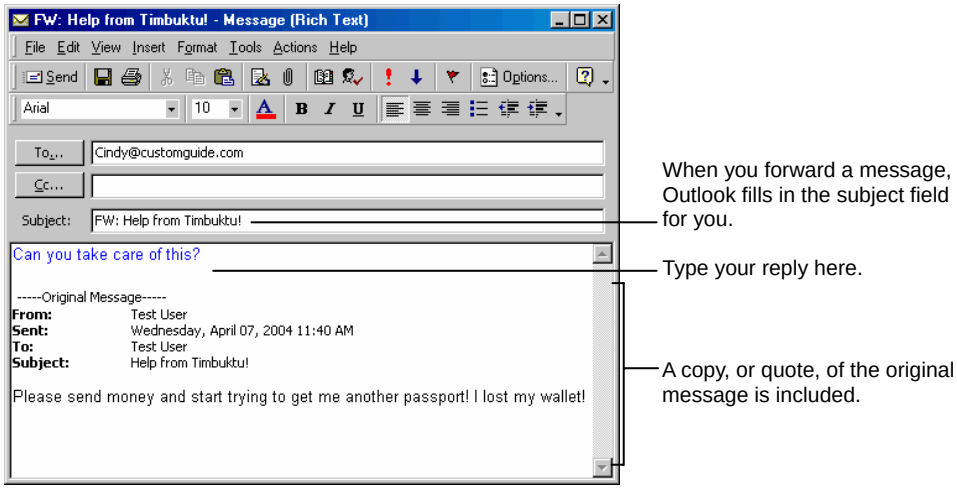


Figure 2-9

IC3

Objective: 3.2.2.1

Req. File: Message created in Lesson 2-3: *Specifying Message Options*.

After you've read a message, you can add your own comments and forward it to someone else. Forwarding a message is very similar to replying to a message, except that you send the message on to someone else instead of back to the original sender. Besides the typical business correspondence, many people like to forward e-mails, called *forwards*, that contain jokes, inspirational (but almost always untrue) stories, and urban legends.

Forward button

This lesson explains how to forward a message.

1. **Select the Help from Timbuktu! message you created earlier.**

   Here's how to forward the message to another recipient:

2. **Click the Forward button on the toolbar.**

   A new Message form appears with the message you are forwarding. You need to specify the recipient to whom you want to send, or forward, the message.

3. **Click the To button.**

   The Select Names dialog box appears.

4. **Click the Show Names from the arrow and select Contacts, if necessary.**

   This will display the names and addresses in the Contacts folder.

5. **Click the name of any recipient in the Name list, click the To button, and then click OK.**

   The Select Recipients dialog box closes and the recipient(s) appear in the To: field. You can also add your own comments about the message you are forwarding.

6. **Click the message body area and type `Can you take care of this?`**

   We don't really need to send this e-mail, so you can close it without saving any changes.

7. **Close the message window and click No when asked if you want to save your changes.**

Quick Reference

To Forward a Message:

1. Find and select the message you want to forward and click the Forward button on the toolbar.
2. Enter the recipient's e-mail address in the To field.
3. (Optional) Enter your own comments in the message body area.
4. Click the Send button on the toolbar.

© 2005 CustomGuide, Inc.

Lesson 2-7: Finding Messages

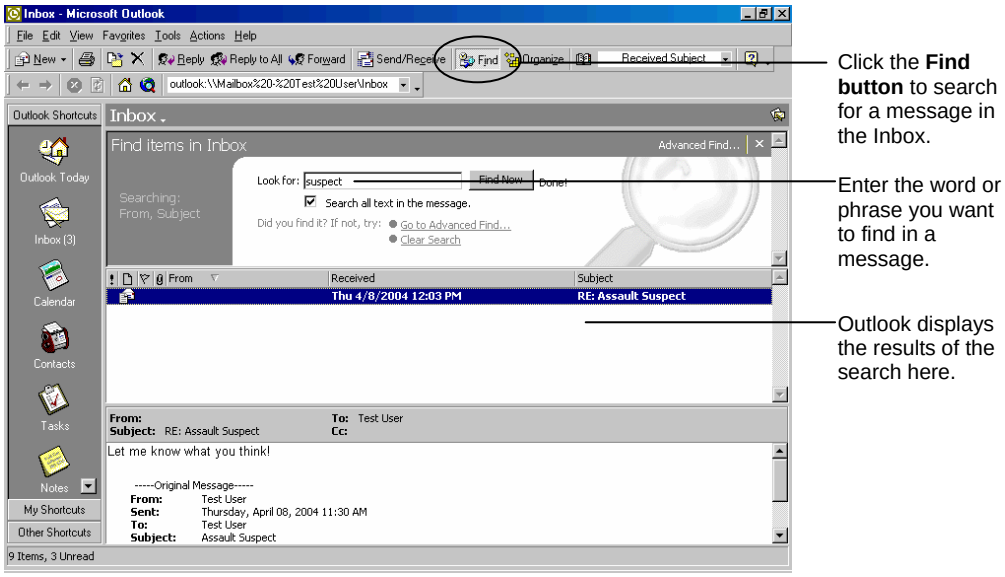


Figure 2-10

Figure 2-10

Outlook's Find feature lets you find e-mail messages that contain a specified word or phrase.

IC3

Objective: 3.2.2.1

Req. File: Message created in Lesson 2-2: *Composing and Sending E-mail*

Find button

Other Ways to Use Find:

- Select Tools → Find from the menu.

The longer you use Outlook, the more cluttered your Inbox becomes, and the more difficult it becomes to find a specific e-mail message. Luckily, Outlook comes with a great Find feature, which can search for and track down your lost e-mails. Find searches the From field, Subject field, and message text of your e-mails for a specified word or phrase. Even if you can only remember a little bit about an e-mail message, the Find feature can probably retrieve it.

In this lesson, you will learn how to use Outlook's Find feature to search for e-mail messages in your Inbox.

1. Click the Find button from the toolbar.

The Find pane appears at the top of the message window. Normally, all you have to do is type the word or phrase you're looking for in the "Look for" box and click the Find Now button.

2. Type `Timbuktu` in the Look for box and make sure the Search all text in the message box is checked.

The "Search all text in the message" box ensures that Outlook looks in the actual text of the messages for the specified word or phrase. Let's see how many e-mail messages contain the word, "Timbuktu".

3. Click the Find Now button.

Outlook searches the Inbox for messages that contain the word and displays the results at the bottom of the screen.

You can close the Find pane when you're finished using it.

4. Click the Close button, located in the upper right-hand corner of the Find pane.

The Find pane closes and Outlook once again displays all the messages in your Inbox.

The Find feature is a lot more advanced than it looks. By clicking the Advanced Find button, you can search for messages specifically by date, subject, importance, and more.

Quick Reference

To Find a Message:

1. Click the Find button on the toolbar.

   Or…

   Select Tools → Find from the menu.
2. Enter the text you want to search for in the Look for text box.
3. Check the Search all text in the message check box to search the actual text in your e-mail messages.
4. Click the Find Now button.

Lesson 2-8: Sorting Messages

Figure 2-11

The Inbox with the messages sorted by subject and listed in ascending order.

Figure 2-12

The same Inbox with the messages sorted by sender and listed in ascending order.

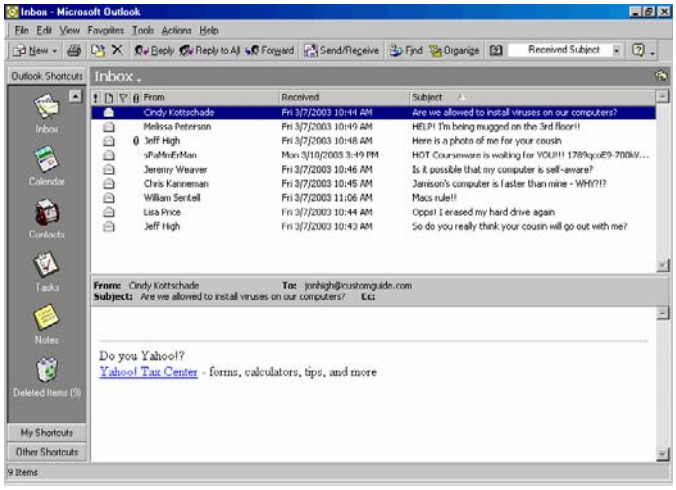


Figure 2-11

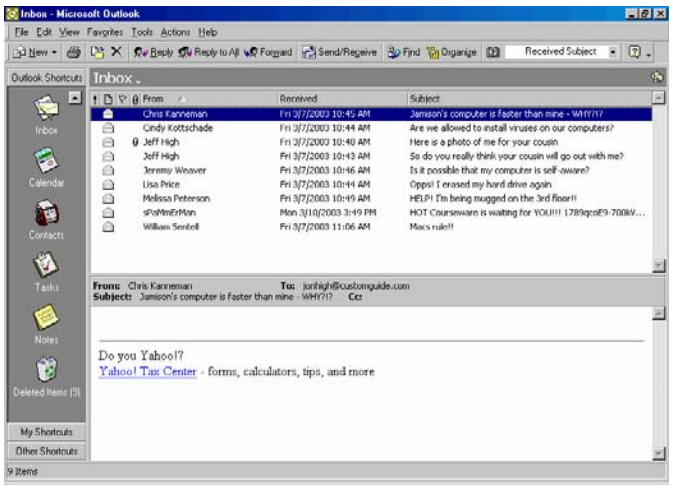


Figure 2-12

IC3

Objective: 3.2.2.1

Req. File: None

Oftentimes, you will want to view a message that's buried in your Inbox. You can quickly sort your messages by clicking any of the column headings in your Inbox. Clicking the "Received" column, for example, sorts the Inbox by when the messages were received.

Let's explore some of the sorting options available in your Inbox.

1. Make sure you are in Inbox view.

First, let's try sorting the e-mail messages in your Inbox by subject. Remember that all you have to do to sort your e-mail messages in Microsoft Outlook is to click any of the column headings in your Inbox.

2. Click the From column heading.

The messages in your Inbox are sorted by the sender's name and listed in ascending alphabetical order. Let's see what happens if you click the From column heading again.

© 2005 CustomGuide, Inc.

3. Click the From column heading again.

The list of e-mail messages changes order. The messages are sorted according to their senders' names, but now they are listed in descending alphabetical order, rather than ascending alphabetical order.

Next, go ahead and see what the Received column heading does.

4. Click the Received column heading.

This time the messages are sorted chronologically according to the date that they were received.

Take some time and try out some of the other column headings. Try and determine which column heading is most useful for sorting your Inbox.

Although there are many types of fields available for sorting your Inbox, take a look at the following table for a description of some of the most common Inbox column headings.

Table 2-5: Commonly Used Inbox Column Headings

Sort	*Description*
Importance	Sorts messages according to importance.
Icon	Sorts messages according to icon type.
Flag Status	Sorts messages according to flag status.
Attachment	Separates messages that contain attachments from those who don't.
From	Sorts messages according to the sender's name.
Received	Sorts messages chronologically according to the date that they were received.
Subject	Sorts messages according to the subject.

Quick Reference

To Sort Messages:

- Click the column heading you want to use to sort the Inbox.

Lesson 2-9: Attaching and Deleting a File

Figure 2-13

You can attach one or more files, called attachments, to an e-mail message.

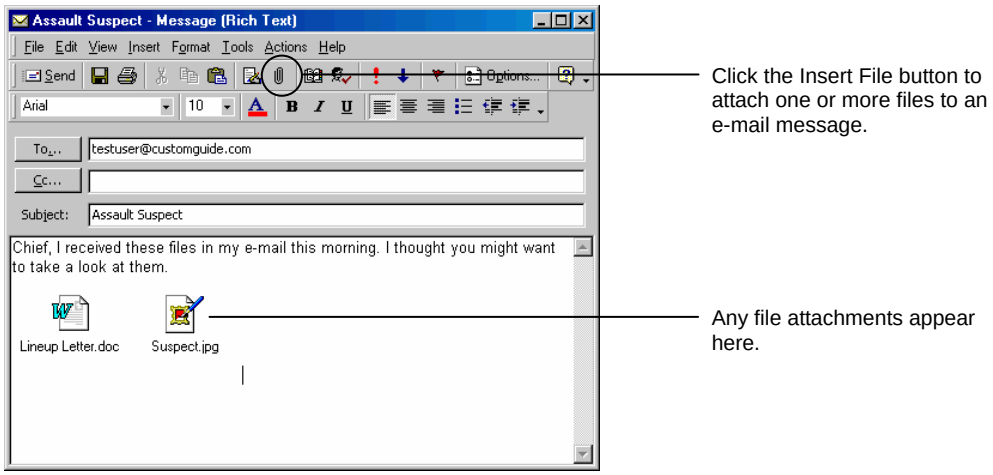


Figure 2-13

IC3

Objective: 3.2.1.2, 3.2.2.2, 3.2.2.3, and 3.2.3.6

Req. File: Lineup Letter.doc and Suspect.jpg

One of the most powerful and useful features of e-mail is the ability to supplement an e-mail message with additional information, including attaching one or more files to a message. Such files are called attachments and can be pictures, documents, and more. Attachments allow the immediate sharing of files with other users. The recipient of an attachment opens the attached file in the program in which it was created.

In this lesson, you will learn how to attach a file to an e-mail message.

1. Click the New Message button on the toolbar.

First we'll compose another e-mail message to ourselves…

2. Create the following e-mail message:
TO: (Enter your own e-mail address here.)
Subject: `Assault Suspect`
Body: `Chief, I received these files in my e-mail this morning. I thought you might want to take a look at them`.

It's a good idea to leave some space between your message and any attachments.

3. Press <Enter>.

OK! You're ready to attach a file to this e-mail message. Here's how:

4. Click the Insert File button on the toolbar.

The Insert File dialog box appears. Now you have to find the file you want to attach.

5. Navigate to your Practice folder.

If you do not know where your practice files are located, ask your instructor for assistance.

You use the Look in list and Up One Level button to navigate to the various drives and folders on your computer.

Insert File button

Other Ways to Insert a File:

- Select Insert → File from the menu.

© 2005 CustomGuide, Inc.

6. Find and double-click the Lineup Letter file.

An icon representing the Lineup Letter appears at the bottom of the e-mail. You can attach more than one file to an e-mail—just repeat the procedures in Steps 4-6.

7. Repeat Steps 4-6 and attach the Suspect file.

It's just as easy to delete an attachment. All you have to do is select the attachment and press the <Delete> key.

8. Click the Suspect file to select it and then press the <Delete> key.

The attachment is deleted. Pretty easy, huh?

We're going to need that attachment for the next lesson, so undo your last action.

9. Press <Ctrl> + <Z> to undelete the Suspect attachment.

You're ready to send this e-mail.

10. Send the e-mail by clicking the Send button on the toolbar.

You can also supplement an e-mail with hyperlinks or graphics embedded into the body of the message.

Quick Reference

To Attach a File to an E-mail:

1. Click the New Mail Message on the toolbar and create the message.
2. Click the Insert File button on the toolbar.

   Or…

   Select Insert → File from the menu.
3. Browse to, find, and double-click the file you want to attach.
4. To attach additional files, repeat Steps 2 and 3.

To Delete an Attachment:

- Select the attachment and press the <Delete> key.

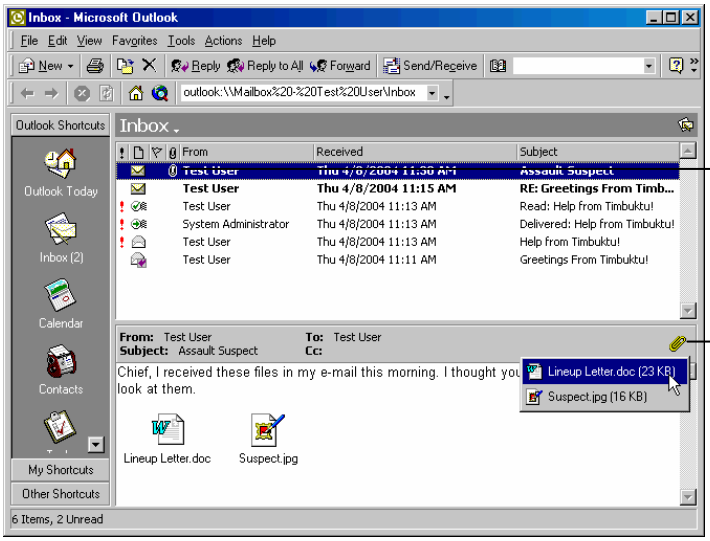
Lesson 2-10: Opening and Saving an Attachment

Figure 2-14

E-mail messages with a paper clip icon have attachments.

Figure 2-15

Outlook gives you the option of opening an attachment or saving it to a file on your hard disk.



A paper clip indicates an attached file.

To view an attachment, click the icon and select the file you want to open.

Figure 2-14

Figure 2-15

IC3

Objective: 3.2.2.2, 3.2.2.3, 3.2.3.2 and 3.2.3.6

Req. File: Previous Lesson

In the previous lesson, you learned how to attach a file to an e-mail message. In this lesson, you will learn how to view an e-mail attachment and save it to your hard disk. Let's get started!

1. **Click the Send/Receive button on the toolbar.**

   You should receive the message you sent yourself in the previous lesson. Notice the message has a paper clip icon next to it, indicating the message contains an attachment.

2. **Select the Assault Suspect message.**

   A paperclip icon appears on the message header in the Preview pane. To view the message's attachment(s), simply click this icon and select the file you want to view.

3. **Click the paper clip icon.**

   A list of the attachments appears, as shown in Figure 2-14.

© 2005 CustomGuide, Inc.

4. Select the Lineup Letter file from the attachment list.

Outlook opens the Lineup Letter in Microsoft Word.

NOTE: Not all recipients may be able to open and view certain attachments. Oftentimes it is difficult to receive large attachments, and some recipients may not be able to display embedded URLs, graphics, or media. It is important to know what types of attachments your recipient's e-mail application can handle before sending out loads of critical information.

5. Close Microsoft Word.

Sometimes Outlook will ask you what you want to do with an attachment. Let's try opening the suspect file.

6. Click the paper clip icon and select the Suspect file from the attachment list.

The Opening Mail Attachment dialog box appears, as shown in Figure 2-15. Outlook displays the Opening Mail Attachment dialog box when its not sure what to do with an attachment. You have two choices:

- **Open it:** Opens the file in the program that created it (if it's installed on your computer). Since some files can contain viruses, it is recommended that you use the Save it to disk option to save files to your hard disk and scan them using an anti-virus program before opening them.
- **Save it to disk:** Saves the file to your hard disk. Make sure you keep track of where you save the file or you may not be able to find it later.

For this lesson we'll open the Suspect file.

7. Select the Open it option and click OK.

Outlook opens the Suspect file in a graphics program (provided you have one installed on your computer).

8. Close the Suspect window.

You're back in Microsoft Outlook.

Attachments are sometimes easier to work with when the e-mail is opened in its own form.

9. Double-click the Assault Suspect message.

The Assault Suspect message opens in its own window, and the two attachments appear at the bottom of the screen. You can easily save any attachment to your hard disk.

10. Right-click the Suspect attachment and select Save As from the shortcut menu.

The Save Attachment dialog box appears. Make sure that you keep track of the folder where you save the attachment. You don't need to save the Suspect attachment to the hard disk, so you can close the Save Attachment dialog box.

11. Click Cancel to close the Save Attachment dialog box and then close the Assault Suspect message window.

One final note on attachments: If you've been paying attention to the news the past few years, you've undoubtedly heard about computer viruses and the havoc they can cause. Many computer viruses are spread as e-mail attachments. For example, the dreaded "Melissa" and "I Love You" viruses that shut down thousands of computers a few years ago were both e-mail attachments. So how do you avoid such viruses? First, never open an attachment that looks suspicious or that is from someone you don't know. Second, make sure you have a good anti-virus program installed on your computer and that you save files to your hard disk before opening them.

Quick Reference

To Open an Attachment:

- In Preview Mode click the paper clip icon, select the attachment you want to view, select Open it, and click OK.

Or…

- Open the E-mail by double-clicking it and then double-click the attachment you want to view.

To Save an Attachment to Your Hard Disk:

1. In Preview Mode click the paper clip icon, select the attachment you want to view, select Save it to disk and click OK.

   Or…

   Open the E-mail by double-clicking it, then right-click the attachment and select Save As from the shortcut menu.
2. Specify a file name and location for the attachment and click OK.

Lesson 2-11: Managing E-mail

Figure 2-16

Use folders to organize your Inbox so that you can save time, prevent unnecessary frustration, and stay productive.

Figure 2-17

If you're having trouble remembering all of the contact information for the people you communicate with on a regular basis, try using the address book.

Figure 2-16

Figure 2-17

IC3

Objective: 3.2.2.4, 3.2.2.5, 3.2.3.2, and 3.2.3.8

Req. File: None

Many people prefer to use e-mail as their primary form of communication. In fact, many regard their personal computer e-mail application as their most important program. In recent years, the uses for e-mail have expanded rapidly. At first, e-mail was only used as a quick, easy, and inexpensive form of communication that offered instantaneous results. E-mail applications have developed rapidly and are now used to conduct business transactions; carry on extended conversations or contract negotiations; manage daily, weekly, or even monthly tasks; and many other types of activities. The result of this "e-mail revolution" is that users can end up sending and/or receiving hundreds of e-mail messages every single day, and that can be a lot to handle!

There are multiple types of e-mail messages that may be received in a given day, such as online newsletters, business e-mails, personal e-mails, Web order forms, invoices, and the list goes on and on. That certainly is a lot of messages to have to deal with on a daily basis!

This lesson is an overview of the basic Inbox management tasks covered in this chapter. Take a look at the suggestions below on managing your e-mail messages effectively and then move on to the subsequent lessons to for a more detailed description of each one.

Use Folders to Organize Your Inbox

A filing cabinet organizes information into related folders; similarly, e-mail application programs store items in their own separate folders. You may be used to folders in Microsoft Windows, where they are used to organize files and programs. In Outlook, each module stores its information in its own folder, which you can view using the Folder List.

Just like the folders in a filing cabinet or in Microsoft Windows, sometimes you may find that one of your Outlook folders is getting too big to manage and you will need to organize and move its information into several new folders or subfolders. For example, you could create a "Personal" folder to store all of your personal e-mail messages. Remember that once you have created these folders, it is important that you move messages to the appropriate folders right away so you do not end up with a cluttered Inbox.

Many people don't use the Folder List because the Outlook Bar includes the folder choices that people use frequently. If you don't send and/or receive much e-mail, you probably won't need to work with the Folder List. On the other hand, if you're having difficulty sorting

© 2005 CustomGuide, Inc.

through the deluge of e-mail you receive on a daily basis, you will definitely want to read on into this chapter to learn how you can use folders to organize your Inbox.

Delete Unimportant E-mails Immediately
This may seem fairly obvious, but sometimes this step can be overlooked. When you receive an e-mail message, take a second and decide what to do with it. If it is important, or relevant to something that you are doing, move the message to an appropriate folder. If the e-mail is not important, for example, a note from your daughter asking if she can make spaghetti for dinner, delete the message immediately. Deleting unimportant e-mails keeps your Inbox neat and tidy, thus preventing "Inbox Overflow." If you do not delete unimportant e-mails right away, your Inbox can become overrun and cluttered, making it difficult to find e-mails that are truly important.

Don't be afraid to delete e-mail messages. Most applications offer you at least one chance to retrieve the message before it is permanently deleted. Outlook, for example, moves deleted e-mail messages to the Deleted Items Folder. This folder must be emptied for the contents to be deleted permanently. If you are familiar with Microsoft Windows, this folder is similar to the Recycle Bin that is found on your desktop.

Use the Address Book and Distribution Lists
An address book is similar to a phone directory, except it can also store e-mail addresses, departments at work, mailing addresses, job titles, and much more! You can use an address book both to look up individual addresses and phone numbers and to address e-mail messages. Unless you only correspond with two or three people, it's almost impossible to memorize the phone numbers, mailing addresses, and e-mail addresses of everyone that you know. Fortunately, if you use the address book, you won't have to.

A distribution list, or group, is an entry contained within the address book that is comprised of several names. You should use distribution lists to send an e-mail message to every member of a group in a single mailing. These groups may include employee groups that work in the same department, members working on the same project or committee, or groups of friends. Distribution lists show up as items in your address book, much as any other individual entry would. You use a distribution list to address an e-mail message just as you would with any other contact. Again, these topics will be covered more extensively in lessons to come.

Managing your e-mail messages may sound complicated now, but when you are finished with this chapter, your messages will be neat and tidy. We have a lot of ground to cover in this chapter, so let's quit reading and start doing!

Table 2-6: E-mail Folders

Folder	*Description*
Inbox	Stores the messages you've received.
Outbox	Temporarily stores any messages that you've composed but have not been sent.
Sent Items	Stores copies of messages you have sent.
Deleted Items	Stores messages that you've deleted.
Drafts	Stores draft messages that you haven't completed yet.

Quick Reference

Managing E-mail Effectively:

- Use folders to organize your Inbox so you don't have to sift through unrelated e-mail messages to find the one you are looking for.

  Or…
- Delete unimportant e-mail messages immediately so they don't clutter your Inbox.
- Use the Address Book and distribution lists to keep your contact information current and organized.

Lesson 2-12: Using Folders to Organize Information

Figure 2-18

How information is stored in a file cabinet.

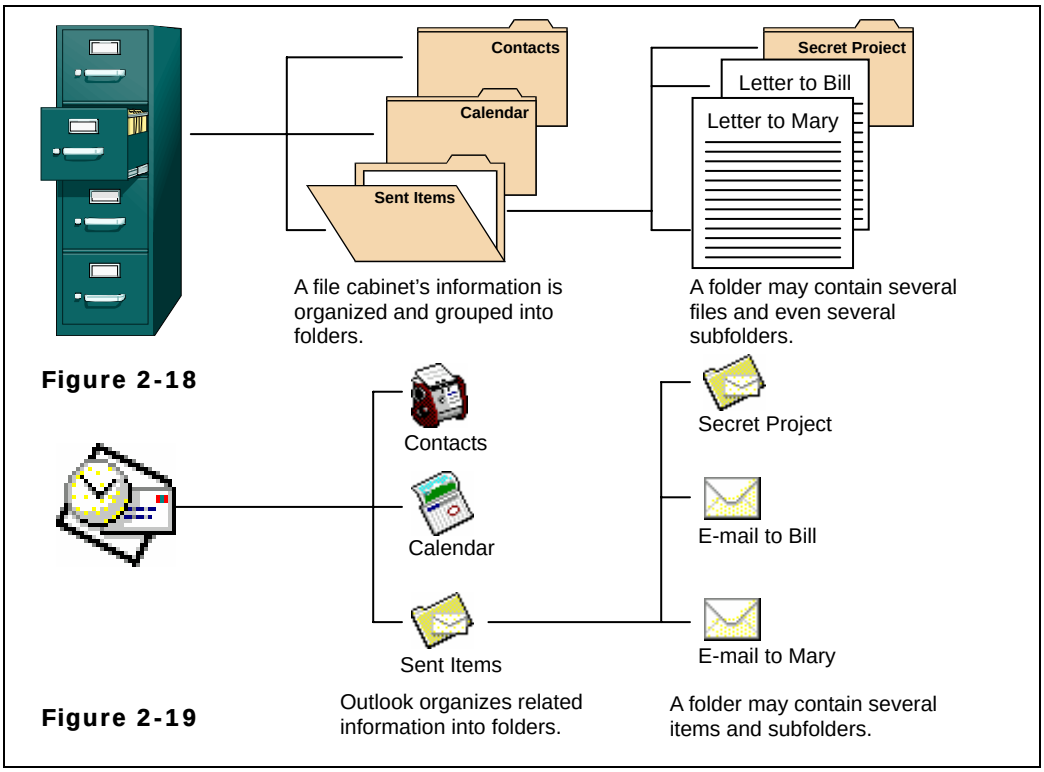
Figure 2-19

How information is stored in Microsoft Outlook.

IC3

Objective: 3.2.2.4

Req. File: None



A filing cabinet organizes information into related folders; similarly, Outlook stores its various items in their own separate folders. You may be used to folders in Windows 95 or 98, which are used to organize your files and programs. You can copy, move, and delete files to and from the folders on your hard drive. Outlook has its own set of folders for storing the items you create in various modules: appointments, contacts, e-mail messages, and so on. Each module stores its information in its own folder, which you can view in the Folders List.

Just like the folders in a filing cabinet or in Windows, sometimes you may find that one of your Outlook folders is getting too big to manage and you will need to organize and move its information into several new folders or subfolders. For example, you could create a "Personal" folder to store your personal e-mail.

Many people don't use the Folder List because the Outlook Bar includes the folder choices that people normally use. If you don't receive and/or send much e-mail, you probably don't need to work with the Folder List, either. On the other hand, if you're having difficulty sorting through the deluge of e-mail you seem to receive on a daily basis, you will definitely want to review the next few lessons, which explain how you can use folders to organize your Outlook information.

© 2005 CustomGuide, Inc.

Lesson 2-13: Creating a Folder

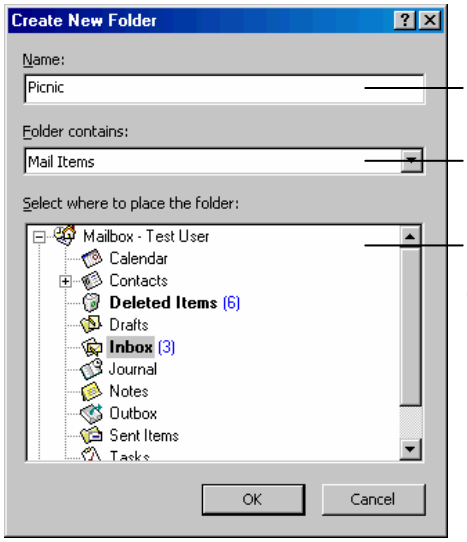


Figure 2-20

Enter the name of the new folder.

Specify the type of item you want to keep in the new folder.

Select where you want to place the new folder. You can display the hidden folders within a folder by clicking the ⊞ plus sign beside the folder.

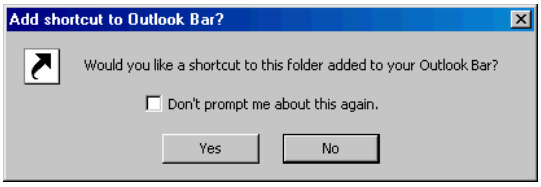


Figure 2-21

Figure 2-20

The Create New Folder dialog box.

Figure 2-21

After you create a new folder, Outlook asks if you would like to add a shortcut to the folder on your Outlook bar.

IC3

Objective: 3.2.2.4

Req. File: None

Outlook normally saves all your incoming e-mail messages in the Inbox folder, but sooner or later you may need to expand your horizons and create your own folders to help you better organize your e-mail messages and other Outlook items. This lesson will show you how to create a new folder to hold and organize your e-mail messages.

1. Open the Folder List by selecting View → Folder List from the menu.

The Folder List opens on the left-hand side of the screen.

2. Right-click anywhere in the Folder List and select New Folder from the menu.

The Create New Folder dialog box appears, as shown in Figure 2-20. You have to specify three things: 1) The name of the new folder, 2) The type of item you want to keep in the new folder, and 3) Where you want to place the new folder.

3. Click in the Name text box and type `Picnic`.

Next, we need to specify what we want to keep in the new folder.

4. Ensure Mail Items appears in the Folder contains list.

Finally, you need to specify where you want to keep the new folder. In this lesson, you place the new folder in the Sent Items folder.

5. Click the Sent Items folder icon.

OK—you're ready to create your new folder.

6. Click OK.

You're not finished yet! After you create a new folder, Outlook asks if you would like to add a shortcut to the folder on your Outlook Bar, as shown in Figure 2-21.

7. Click No.

Outlook creates the new folder under the Sent Items folder.

Quick Reference

To Create a New Folder:

1. Right-click anywhere in the Folder List and select New Folder from the shortcut menu.

   Or…

   Select File → New → Folder from the menu.
2. Enter the folder's name in the Name text box.
3. Specify what you want to keep in the new folder by making a selection form the Folder contains list.
4. Specify where you want to keep the new folder by clicking the appropriate folder's icon.
5. Click OK.

Lesson 2-14: Renaming, Copying, Moving, and Deleting a Folder

Figure 2-22

To move a folder, drag it to a new location on your computer.

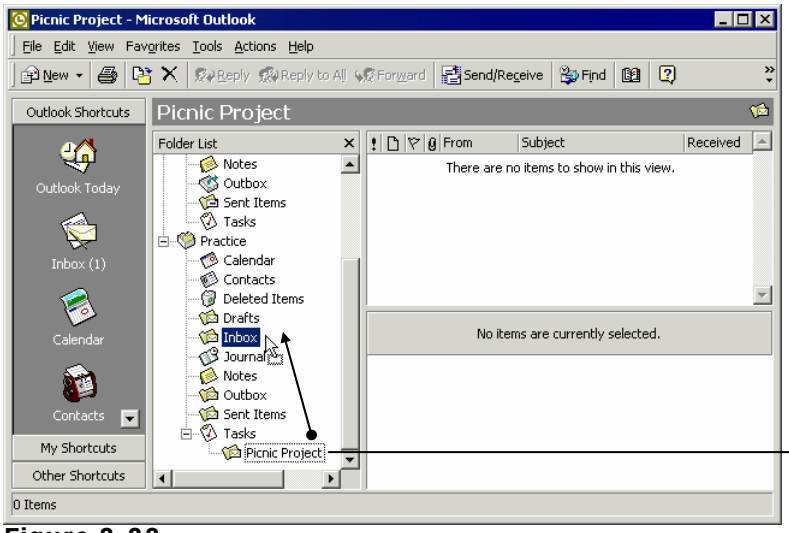
Figure 2-23

The Copy Folder dialog box.

IC3

Objective: 3.2.2.4

Req. File: Prev. Lesson



You can move folders in the Folder List by clicking and dragging them to the desired location.

Figure 2-22

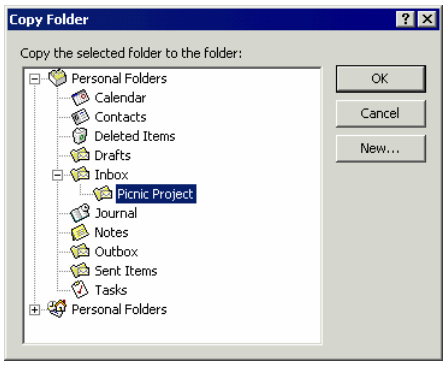


Figure 2-23

You probably don't reorganize the folders in your file cabinet very often—and you probably won't need to move or copy your Outlook folders very often, either. When you find you *do* need to move or copy a folder, however, you can do so by using one of simple methods:

- Clicking and dragging
- Using the toolbar or menu

You'll learn how to copy and move folders using both methods in this lesson. You'll also learn how to rename and delete a folder.

1. Make sure the Folder List is open and locked in place.

Remember: to open the Folder List, click the Folder banner or select View → Folder List from the menu.

© 2005 CustomGuide, Inc.

2. **Right-click the Picnic folder and select Rename Picnic from the shortcut menu.**

   Now you can rename the Picnic folder.

3. **Type `Picnic Project`.**

   There are several ways to move and/or copy a folder. One of the most common methods is clicking and dragging.

4. **Click and drag the Picnic Project folder to the Inbox folder located under the Practice folder, as shown in Figure 2-22.**

   You can copy a folder and its contents by holding down the <Ctrl> key as you drag the folder.

   You're probably already beginning to suspect that there are several methods for doing exactly the same thing in Outlook. Another popular way of moving or copying folders is to use the menu.

5. **Select the Picnic Project folder and select Edit → Copy to Folder from the menu.**

   The Copy Folder dialog box appears, as shown in Figure 2-23. All you have to do here is specify where you want to copy the folder.

6. **Click the Notes folder located under the Practice folder.**

   This will copy the Picnic Project to the Notes folder.

7. **Click OK.**

   Outlook copies the Picnic Project folder to the Notes folder, although you will have to expand the Notes folder to see it.

8. **Click the expand button (⊞) beside the Notes Folder.**

   There's the copied Picnic Project folder. Here's how to delete a folder:

9. **Click the Picnic Project folder to select it, and then press the <Delete> key.**

   A dialog box may appear, asking you to confirm the folder deletion.

10. **Click Yes to delete the folder.**

    The Picnic Project folder and all its contents are deleted and disappear from the window. Outlook places any deleted files or folders in the Deleted Items folder in case you change your mind later on and decide you want to restore the folder.

    NOTE: Deleting a folder can be dangerous. Before you delete a folder, make sure it doesn't contain any important information. If you don't know what the contents of a folder are, you shouldn't delete it.

There's no better way to organize Outlook than by creating and using your own folders to categorize information—especially if you receive several dozen e-mails every day.

📖 Quick Reference

To Do Any of the Following, First Lock the Folder List in Place...

1. Open the Folder List by clicking the Folder Banner or by selecting View → Folder List from the menu.
2. Lock the Folder List in place by clicking the Push Pin button.

Then...

To Rename a Folder:

- Right-click the folder, select Rename from the shortcut menu, and enter the new name.

To Delete a Folder:

- Select the folder you want to delete, press <Delete>, and click Yes to confirm the deletion.

To Move a Folder:

- Click and drag the folder to the desired location.

Lesson 2-15: Selecting One or More Mail Messages

Figure 2-24

When you want to select a group of adjacent items, select the first item you want to select, hold down the <Shift> key and click the last item.

Figure 2-25

Use the <Ctrl> key when you want to select several nonadjacent items.

IC3

Objective: 3.2.2.4

Req. File: Prev. Lesson

Quick Reference

To Select Several Consecutive Items:

- Click the first item you want to select, press and hold down the <Shift> key and click the last item you want to select.

To Select Several Nonconsecutive Items:

- Press the <Ctrl> key as you click each item that you want to select.

To Move E-mail Messages to a New Folder:

- With the desired e-mail message(s) selected in the Inbox, click and drag any of the selected

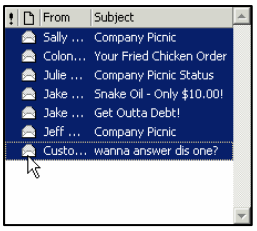
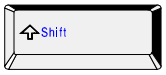


Figure 2-24



Consecutive Items
Click the first item you want to select, press and hold down the **<Shift>** key, and click the last item you want to select.

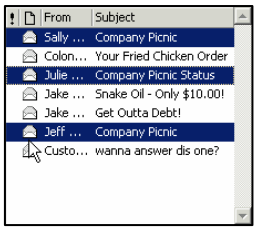
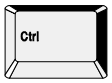


Figure 2-25



Nonconsecutive Items
Press the **<Ctrl>** key as you click each item that you want to select.

The advantage of selecting Outlook items is that you can move, copy, and/or delete many items at once instead of individually. For example, you could select all the e-mail messages pertaining to a particular project and move them to a Project folder instead of having to move each e-mail message individually.

In this lesson, you will learn how to select more than one Outlook item at a time so that you can move, copy, or delete a group of items at the same time.

1. **Make sure the Folder List is open.**
2. **Click the Inbox folder.**

   Your Inbox may contain several messages that pertain to one subject. You can select random, or non-adjacent, items by holding down the <Ctrl> key and then clicking each item you want to select.
3. **Hold down the <Ctrl> key as you click each e-mail message that contains the subject, as shown in Figure 2-25.**

   Now you can move, copy, or delete any the selected items all at once.
4. **With the e-mail messages still selected, click and drag any of the selected messages to the folder that you created in the last lesson.**

   If the folder you created earlier isn't visible, click the ⊞ plus symbol beside the Inbox Folder.

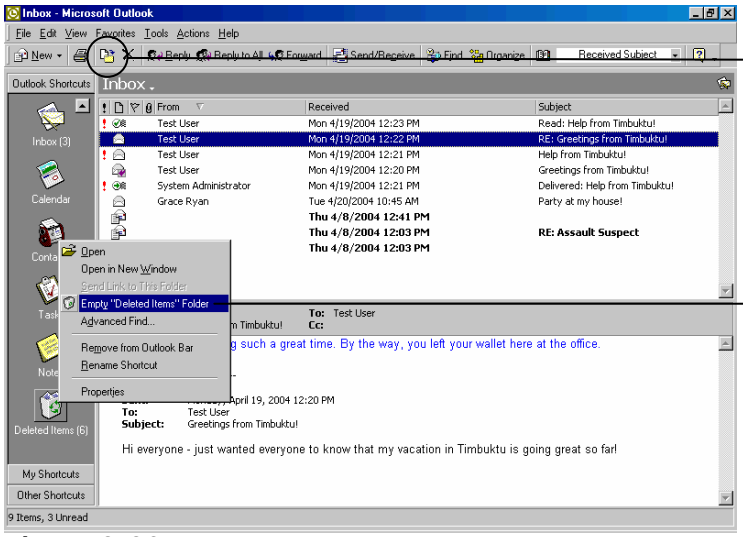
   If the items you want to select are adjacent to one another, you can click the first item you want to select and then hold down the <Shift> key as you click the last item of the group of you want to select.
5. **Click the first e-mail message, hold down the <Shift> key, and click the last message.**

   You've selected the first message, the last message, and all the messages in between.
6. **Click anywhere outside the selected messages to deselect them.**

   Move on to the next step and close the Folder List.
7. **Close the Folder List.**

© 2005 CustomGuide, Inc.

Lesson 2-16: Deleting Messages



To retrieve a message from the Deleted Items folder, click the **Move to Folder button** and select the appropriate folder (usually the Inbox).

Empty the Deleted Items Folder by right-clicking the Deleted Items button on the Outlook Bar and selecting the Empty Deleted Items Folder from the shortcut menu.

Figure 2-26

Figure 2-26

The Deleted Items folder stores all your deleted e-mail messages—as well as other deleted Outlook items.

IC3

Objective: 3.2.2.4

Req. File: Message created in Lesson 2-9: *Attaching and Deleting a File*

When you delete an e-mail (or any Outlook item), Outlook places it in the Deleted Items folder. Like the Windows Recycle Bin, the Deleted Items folder contains deleted Outlook items. If you change your mind and decide you need a deleted message, it's easy to find and retrieve it. This lesson will show you how to open the Deleted Items folder, restore a deleted message, and empty the Deleted Items folder.

1. Select the Assault Suspect message in your Inbox and press <Delete>.

Outlook removes the Assault Suspect message from the Inbox and places it in the Deleted Items folder.

2. Switch to the Deleted Items folder by clicking the Deleted Items button on the Outlook Bar.

The Deleted Items folder displays all the messages you have recently deleted. If you accidentally delete a message, you can easily retrieve it.

3. Find and select the Assault Suspect message, click the Move to Folder button on the toolbar, and select the Move to Folder option. Select Inbox from the folder list and click OK.

Outlook moves the Assault Suspect message back to the Inbox. Occasionally, you will want to empty the Deleted Items folder. Here's how:

4. Right-click the Deleted Items button on the Outlook Bar, select the Empty "Deleted Items" Folder option from the shortcut menu, and click Yes to confirm the deletion.

Outlook permanently deletes the contents of the Deleted Items folder.

You can also have Outlook automatically empty the Deleted Items folder every time you quit Outlook. Simply select Tools → Options from the menu, click the Other tab, and check the "Empty the Deleted Items folder upon exiting" box. Be very careful when deleting all messages in the Deleted Items folder, however, because once you do so there is no way to retrieve them.

Quick Reference

To Delete a Message:

- Select the message and click the Delete button on the toolbar.

Or…

- Select the message and press the <Delete> key.

To View Deleted Items:

- Click the Deleted Items button on the Outlook Bar.

To Empty the Deleted Items Folder:

- Right-click the Deleted Items button on the Outlook Bar, select Empty "Deleted Items" Folder from the shortcut menu, and click Yes to confirm the deletion.

Lesson 2-17: Marking Messages as Read or Unread

Figure 2-27

The Inbox with the "Greetings from Timbuktu" message marked as unread.

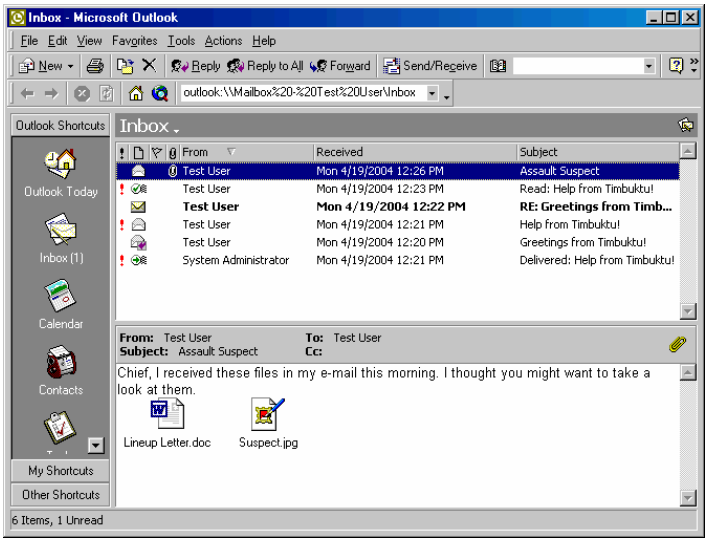


Figure 2-27

IC3

Objective: 3.2.2.4

Req. File: Message created in Lesson 2-3: *Specifying Message Options*

Sometimes, after you have read an e-mail message, you may want to mark the message as unread. You may also want to mark an unread e-mail message as having been read. Doing this will change the status of your Inbox.

To mark an e-mail message as read or unread, you must first open the Edit menu. There are several e-mail message status choices here:

- **Mark as Read:** Marks an unread e-mail message as having been read.
- **Mark as Unread:** Marks an already viewed e-mail message as not having been read.
- **Mark All as Read:** Marks all messages in the Inbox as Read so that it appears that there are no new e-mail messages waiting to be read.

Quick Reference

To Mark an E-mail Message as Read or Unread:

1. Select an e-mail message from the Inbox.
2. Select Edit from the menu and then choose an e-mail message status option.

   Or…

   Right-click the e-mail message and select an e-mail message status option from the shortcut menu.

1. Select the Help from Timbuktu! message you created earlier.

All you have to do to select a message is to click on it.

You have already read this message, so you want to mark it as not having been read.

2. Select Edit → Mark as Unread from the menu.

The message is now marked as unread, as seen in Figure 2-27. You know that the status has changed, because the envelope icon that appears to the left of the message has changed from being open to being closed. Also, the message text appears in bold face. All new messages appear in bold.

Go ahead and mark all of the messages in your Inbox as having been read.

3. Select Edit → Mark All as Read from the menu.

All of the messages are now shown as having been read. They each have an open envelope icon next to the message text and they do not appear in bold.

© 2005 CustomGuide, Inc.

Lesson 2-18: Flagging Items

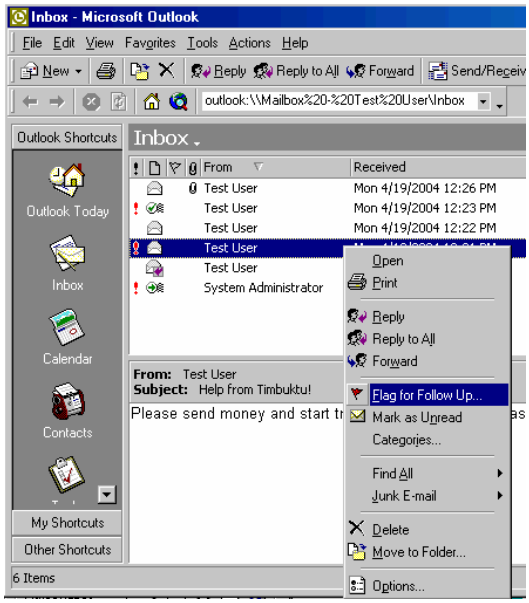


Figure 2-28

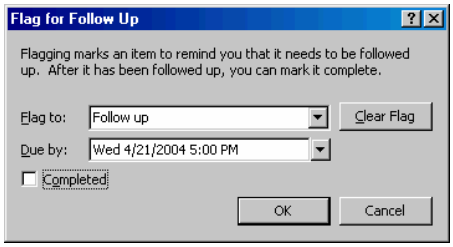


Figure 2-29

Figure 2-28

You can flag any Outlook Item for follow up by right-clicking the item and selecting Flag for Follow Up from the menu.

Figure 2-29

The Flag for Follow Up dialog box.

IC3

Objective: 3.2.2.4

Req. File: Prev. Lesson

Flagging is an easy way to remind yourself to follow up on an important e-mail message, contact, or task. When you flag an item, a small icon appears next to the item. You can specify a category for a flagged item, such as "Follow up" or "Call" and a reminder date, so that Outlook reminds you to follow-up with an item when the specified date arrives. Flags are also very useful when used with Outlook's various views. For example, you can filter out only those e-mail messages, contacts, or tasks that are flagged.

Whether you're working with a message, task, or contact, the procedure for flagging items is the same. Here it is…

1. **Right-click the Help from Timbuktu! message that you sent yourself earlier and select Flag for Follow Up from the shortcut menu.**

   The Flag for Follow Up dialog box appears, as shown in Figure 2-29. Here you can specify the reason you are flagging the message and add an optional reminder.

2. **Click the Flag to list arrow.**

   As you can see, there are many different categories you can choose from. We'll use the standard Follow Up description for now.

3. **Choose the Follow Up option from the drop-down list.**

   You can also add a reminder to a flag.

4. **Click the Due by list arrow and select the date of your choice from the drop-down calendar.**

   That's all there is to flagging an Outlook item.

5. **Click OK.**

When you have followed up on a flag, you can either clear it or mark it as complete. Simply right-click the item, select Flag for Follow Up from the shortcut menu, and click the Clear Flag button or check the Completed box.

Quick Reference

To Flag an Item:

1. Right-click the item and select Flag for Follow Up from the shortcut menu.
2. Click the Flag to list arrow and select a category.
3. (Optional) Click the Due by list arrow and select the day you want to be reminded of the flagged item.
4. Click OK.

Lesson 2-19: Exporting Information

Figure 2-30

The Import and Export Wizard dialog box.

Figure 2-31

Step two of the Export Wizard: specifying the type of file you want to export to.

Figure 2-32

Step three of the Export Wizard: specifying the folder whose information you want to export.

Figure 2-33

The final step of the Export Wizard: specifying the location where you want to save the information.

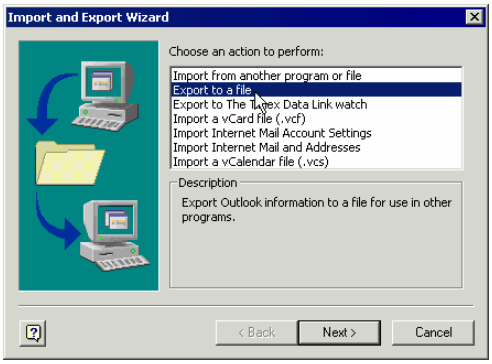


Figure 2-30

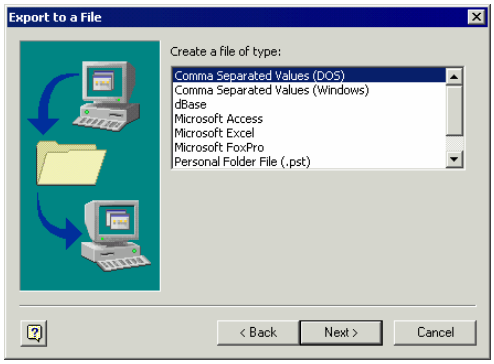


Figure 2-31

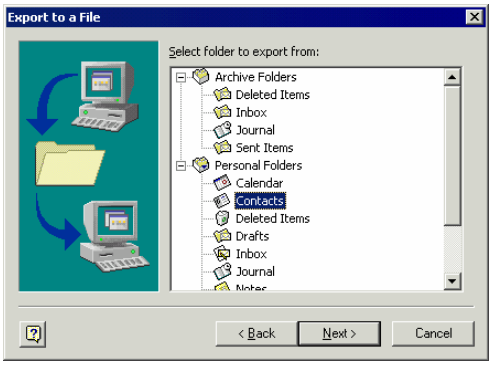


Figure 2-32

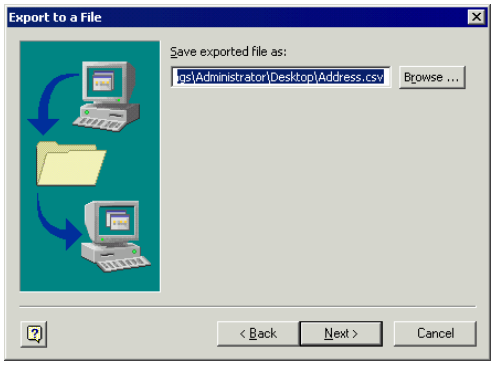


Figure 2-33

IC3

Objective: 3.2.2.4

Req. File: None

When you export Outlook information, you save it in a different format so that it can be understood and opened by different programs. For example, you might export your Contact list to an Excel worksheet.

In this lesson, you will learn how to export information from an Outlook folder and save it in an external file.

1. **Select File → Import and Export from the menu.**

   The Import and Export Wizard dialog box appears, as shown in Figure 2-30.

2. **Select the Export to a file option and click Next.**

   The Export to a File dialog box appears, as shown in Figure 2-31. Here is where you tell Outlook the type of file you want to export to.

3. **Select a file type from the list and click Next.**

   The third step in the Export Wizard appears, as shown in Figure 2-32. Here you need to select the folder whose data you want to export.

4. **Select the folder whose data you want to export and click Next.**

   The final step in the Export Wizard appears, as shown in Figure 2-33. Now you can save the exported information.

© 2005 CustomGuide, Inc.

5. Specify the name and folder where you want to save the exported information and click Next.

Remember that you can use the Browse button to navigate to the folder where you want to save the exported file.

6. Click the Export check box and click Finish.

Outlook saves the information to the file.

Outlook can read and write to a number of different file formats. The following table lists the more common file formats that people import and/or export information to and from.

Table 2-7: Exportable File Formats and Extensions

File Format	*Extensions*
Personal Folder File	.pst
Text (Comma delimited)	.csv
Text (Tab delimited)	.txt
Microsoft Access	.mdb
Microsoft Excel	.xls, .xlt
Microsoft FoxPro	.dbf

Quick Reference

To Export Information:

1. Select File → Import and Export from the menu.
2. Select the Export to a file option from the list and click Next.
3. Select the desired file format from the list and click Next.
4. Select the folder whose data you want to export and click Next.
5. Specify the name and folder where you want to save the exported information, click Next and then click Finish.

Lesson 2-20: Manually Archiving Information

Figure 2-34

The Archive dialog box.

IC3

Objective: 3.2.2.4 and 3.2.3.8

Req. File: None

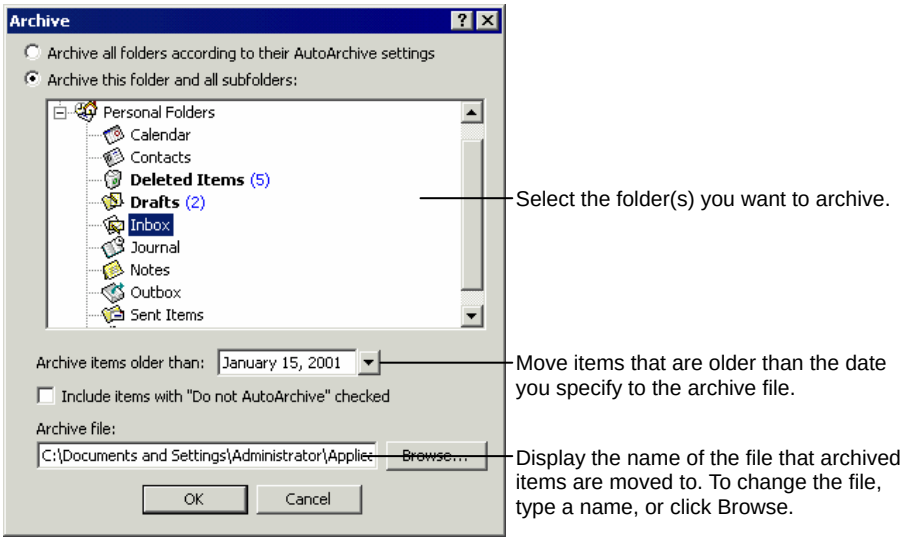


Figure 2-34

Your Outlook folders become larger as more items are stored in them. As your folders become larger, Outlook becomes slower, and finding items can become increasingly difficult. This is where archiving becomes useful. When you archive Outlook information, you transfer old items to a storage file, thus removing the information from its original location. There are two ways to archive information in Outlook:

- **Manually:** You can manually transfer old items from a selected folder by selecting File → Archive on the menu.
- **Automatically using AutoArchive:** Once you configure Outlook's AutoArchive feature, Outlook will automatically archive old information. Several Outlook folders are set up with AutoArchive already turned on. These folders and their default aging periods are Calendar (6 months), Tasks (6 months), Journal (6 months), Sent Items (2 months), and Deleted Items (2 months). Inbox, Notes, Contacts, and Drafts do not have AutoArchive activated automatically.

Remember that when you archive information, the original items are copied to the archive file and then removed from the current folder—so be cautious about what you archive.

This lesson explains how to manually archive Outlook information.

1. **Select File → Archive from the menu.**

   The Archive dialog box appears, as shown in Figure 2-34. Here is where you determine what you want to archive:

2. **Make sure the Archive This Folder and all subfolders option is selected.**

   Checking this option tells Outlook to archive the folder(s) you select.

© 2005 CustomGuide, Inc.

3. Select the folder that you want to archive.

If you use e-mail frequently, the Inbox and Sent folders make excellent archive candidates.

Next, you need to specify how old the items must be before they can be archived. For example, you could specify to archive any e-mail messages that are older than 3 months.

4. Click the Archive items older than list arrow and select a date from the list.

Next you need to specify the name and folder of the archive file, if you so choose.

5. (Optional) Specify the name and folder of the archive file in the Archive File box.

By default, Outlook saves the archive file in a rather obscure folder that you will probably have a great deal of trouble finding. You may want to specify a file name and folder that will make it easier for you to find if you plan on looking at any archived information later.

NOTE: If you decide to specify the name and folder of the archive file, make sure that you use this same file when you archive information in the future. When you archive information, Outlook doesn't overwrite the archive file but appends any new items to it. By using the same archive file, you can keep all your old Outlook information in the same place.

6. Click OK.

Outlook archives the items in the specified folder that are older than the specified date, saving them in the archive file and then removing them from their original locations.

The most important thing to remember when archiving information is that Outlook actually removes any items that are older than the date you specify—so make sure that you check and see if there are any important items that are older than the specified date before you archive a folder.

Quick Reference

To Manually Archive Items:

1. Select File → Archive from the menu.
2. Ensure the Archive This Folder and all subfolders option is selected.
3. Select the folder that you want to archive.
4. Click the Archive items older than list arrow and select the date to specify how old items must be in order to be archived.
5. (Optional) Specify the name and folder of the archive file in the Archive File box.
6. Click OK.

Lesson 2-21: Adding New Address Book Entries

Figure 2-35

The New Entry dialog box.

Figure 2-36

The New Internet Address Properties dialog box.

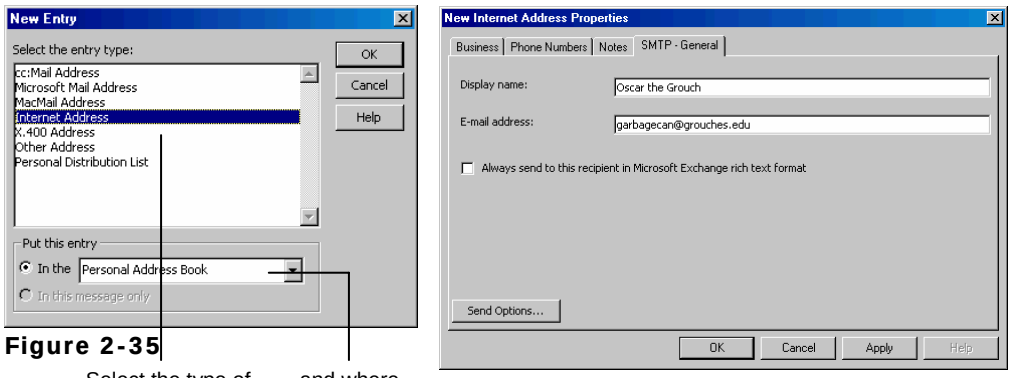


Figure 2-35

Select the type of entry you want to create…

…and where you want to put it.

Figure 2-36

IC3

Objective: 3.2.2.5

Req. File: None

If you use the Microsoft Outlook Address Book, you don't have to memorize lots of confusing phone numbers and e-mail addresses. Simply enter the names and e-mail addresses of the people to whom you regularly send messages, and you'll never have to remember another obscure e-mail address again. This lesson will show you how to add an e-mail address to the Microsoft Outlook Address Book.

Address Book button

1. **Click the Address Book button on the toolbar.**

   The Address Book window appears.

New button

Other Ways to Create a New Contact:

- Press <Ctrl> + <N>.

2. **Click the New Entry button on the toolbar.**

   The New Entry dialog box appears, as shown in Figure 2-35. First, you need to specify where you want to save the new Address Book entry. Most of the time, you will want to save entries in the Contacts list.

3. **In the Put this entry panel, click the In the list arrow and select Contacts.**

   Because there are many different types of e-mail and messaging systems, the Address Book can create several different types of entries. More than likely, if your organization is using Microsoft Outlook, they're using Microsoft Exchange as well. Microsoft Exchange is Microsoft's own e-mail messaging system, and it runs on a Windows NT or Windows 2000 server.

   The most common types of entries are Internet Addresses (the typical name@domain.com) and Microsoft Mail Addresses (if your organization is using Microsoft Exchange as its mail server).

4. **Select Internet Address and click OK.**

   The New Internet Address Properties dialog box appears, as shown in Figure 2-36.

5. **Type your name in the Display name field.**

   Next, specify your e-mail address.

6. **Enter your e-mail address in the E-mail address text box.**

   To add additional information about the recipient, such as a mailing address or phone number, click the appropriate sheet tabs and enter the information.

© 2005 CustomGuide, Inc.

7. Click OK to close the New Internet Address Properties dialog box.

You return to the Address Book window. If you aren't in the Personal Address Book view, select it from the "Show Names from the" text box. In your Personal Address Book, you will see the entry you just made.

8. Close the Address Book window.

When you add entries to the Address Book, you can add as much or as little information as you want. For example, you could enter a person's department, mailing address, and phone numbers—or, you could just enter their name and e-mail address.

As mentioned earlier, you can create and work with several different types of Address Book entries. The following table describes the most common Address Book entries.

Table 2-8: Types of Address Book Entries

Entry	*Description*
cc: Mail Address	Sends e-mail messages to Lotus cc: mail users.
Fax Address	Sends faxes to the specified phone number.
Microsoft Mail Address	Sends e-mail messages to Microsoft Exchange users.
MacMail Address	Sends e-mail messages to MacMail users.
Internet Address	Sends e-mail messages to users on the Internet (using typical name@domain.com e-mail address).
X.400 Address	Sends e-mail messages to X.400 users.
Other Address	Uses Other Address entries when you don't have a person's e-mail address, but still want to store their name, phone number, and address.
Personal Distribution List	A distribution list is composed of several Address Book entries so you can send an e-mail message to several people at once.

Quick Reference

To Add an Entry to the Address Book:

1. Click the Address Book button on the toolbar.
2. Click the New button on the toolbar. Then, select the type of contact you want to enter and the address book you want to enter it into.
3. Enter the desired information about the contact.
4. Click OK and close the Address Book window.

Lesson 2-22: Adding and Updating Contacts Using E-mail Messages

Figure 2-37

The message that you want to click and drag to the Contacts icon in the Outlook Bar.

Figure 2-38

The New Contact dialog box with the information from the e-mail message automatically filled in.

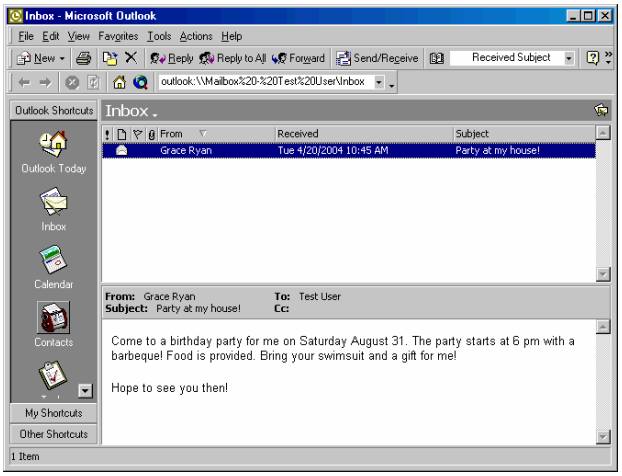


Figure 2-37

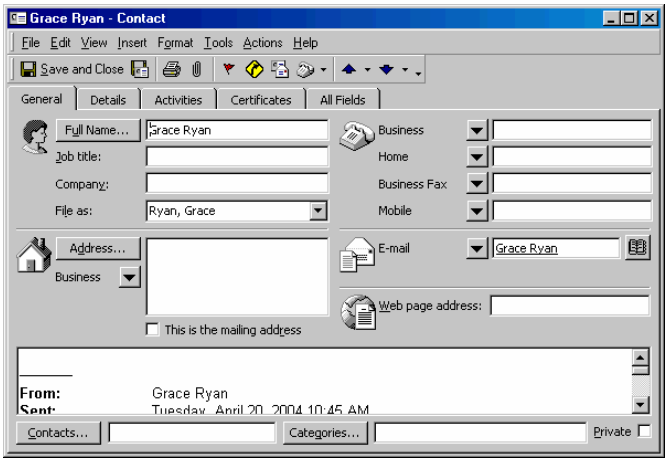


Figure 2-38

IC3

Objective: 3.2.2.5

Req. File: None

You just learned how quickly and easily you can add contacts to your Address Book. However, it can get pretty tedious typing all of that contact information if you have a lot of people to add to your Address Book at once. Also, if one of your contacts changes e-mail addresses, it can be a pain to have to find their name in your Address Book just to change one facet of their information. Luckily, there is an easier way to add and update entries in your Address Book: use the e-mail messages from your Inbox. All you have to do is click and drag the e-mail message to the Contacts icon in the Outlook Bar (any information contained in your Contacts list should also translate into your Address Book). Let's try it out.

1. **Click the Send and Receive button to see if you have any new messages.**

   Any new messages now appear in your Inbox.

© 2005 CustomGuide, Inc.

First, you need to choose a message that contains the contact information you want to add to your Address Book.

2. **Select the message from your Inbox that contains the contact information that you want to add or update to your Address Book.**

   The message will appear highlighted when it has been selected. Now all you have to do is click and drag the message over to the Contacts icon that is located in the Outlook Bar.

3. **Click and drag the message over to the Contacts button in the Outlook Bar, then release the mouse button.**

   The New Contact dialog box appears, as shown in Figure 2-38. Notice that all of the contact information contained in the e-mail message has been automatically filled in the New Contact form.

   Here you can add any additional information about the contact such as mailing address, job title, or phone number. When you are finished, save and close the new contact information.

4. **Click the Save and Close button located on the toolbar.**

   If the name or the e-mail address for the new contact already exists somewhere in the Address Book, the Duplicate Contact Detected dialog box will appear. There are two options to choose from:

   - **Add this as a new contact anyway:** Add a new contact even if some of the information is a duplication of another contact.
   - **Update new information from this contact to the existing one:** Change the information contained in the existing contact so that it is up-to-date.

   If you need to view the existing contact before you can make a decision, click the Open Existing Contact button. When you are finished…

5. **Click OK.**

   The contact has either been added or updated. To view the updated or added contact, click the Address Book button and navigate to your Contacts list.

Pretty easy, huh? Move onto the next lesson to learn how to create a distribution list so you can send one e-mail message to an entire group of people all in one simple step.

Quick Reference

To Do This:

1. Click the Address Book button on the toolbar.
2. Click the New button on the toolbar. Then, select the type of contact you want to enter and which address book you want to enter it into.
3. Enter the desired information about the contact.
4. Click OK and close the Address Book window.

Lesson 2-23: Creating a Distribution List

Figure 2-39

The New Personal Distribution List Properties dialog box.

Figure 2-40

The Edit Members dialog box.

IC3

Objective: 3.2.2.5

Req. File: None

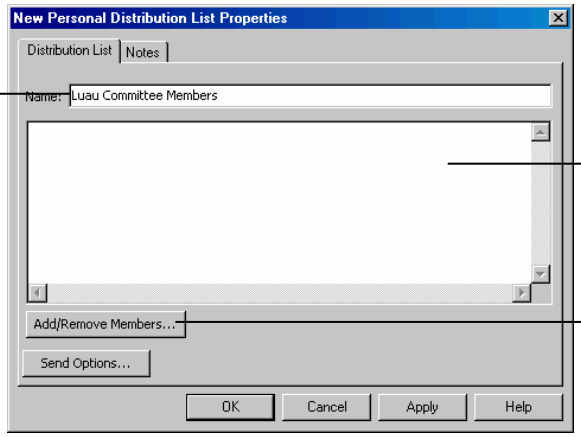


Figure 2-39

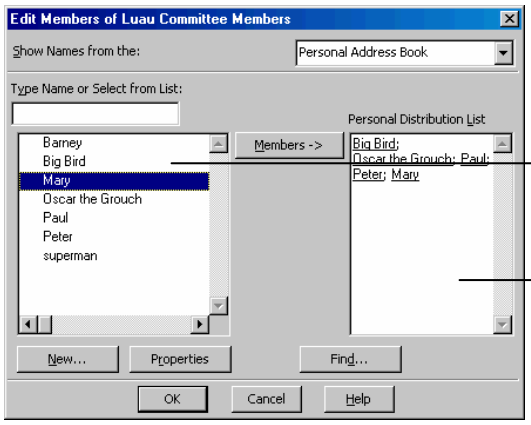


Figure 2-40

A distribution list or group is an Address Book entry comprised of several names from the Address Book. You use distribution lists to send an e-mail message to each member in the group in a single mailing. You can use distribution lists to quickly send e-mails to:

- All employees in the same department or organization.
- Members on the same project or committee.
- Generic messages to a group of friends, such as a humorous e-mail or a notice that your address has changed.

Distribution lists show up as items in your Address Book and Contact list, just like a person's name. You use a distribution list to address an e-mail message just as you would with any other contact.

In this lesson, you will learn how to create a distribution list that you can use to send e-mails to multiple recipients.

© 2005 CustomGuide, Inc.

1. Click the Address Book button on the toolbar.

The Address Book dialog box appears.

2. Click the New button on the toolbar.

The New Entry dialog box appears. First, you need to ensure that Outlook saves the new group in your Personal Address Book.

3. Click the In the list arrow and select Contacts.

Now let's create our distribution list!

4. Select Personal Distribution List from the Select the entry type box and click OK.

The New Personal Distribution List Properties dialog box appears, as shown in Figure 2-39. First, we need to give our new group, or distribution list, a name.

NOTE: Distribution lists and groups are the same thing—so don't be confused when you see Outlook interchanging these terms.

5. Click the Name text box and type `Luau Committee Members`.

Always try to give your groups a meaningful name so that they make sense to both you and to other Outlook users. Now let's add some members to this group.

6. Click the Add/Remove Members button.

The Edit New Personal Distribution List Members dialog box appears, as shown in Figure 2-40. The left side of the dialog box displays contacts from your Address Book, and the right side displays the members of the group. To add members to the group, simply double-click the contact names you want to add.

7. Find and double-click your name from the list.

Outlook adds your name to the Luau Committee Members personal distribution list.

8. Add 2 or 3 more contacts of your choice to the distribution list.

That's all there is to creating a distribution list!

9. Click OK to close the Edit New Personal Distribution List Members dialog box.

The Edit New Personal Distribution List Members dialog box closes and you're once again looking at the New Personal Distribution List Properties dialog box. This time, the dialog box contains the names that you just added to the distribution list in the lower panel.

10. Click OK to close the New Personal Distribution List Properties dialog box.

The New Personal Distribution List Properties dialog box closes and you're back at the Address Book.

11. Click the Show Names from the: list arrow and select Personal Address Book.

This displays the contents of your Personal Address Book. Notice that the new personal distribution list you created appears among your personal Address Book entries.

12. Close the Address Book dialog box.

People come and go on distribution lists, just like anywhere else. Luckily you can easily edit any distribution list. Just open either the Address Book or the Contacts List, and find and double-click the name of the distribution list. To remove a member from the list, select the name and click the Remove button. To add a new member to the list, click Select Members and double-click the contacts you want to add to the list.

New button

Other Ways to Create a New Contact:

- Press <Ctrl> + <N>.

Quick Reference

To Create a Distribution List:

1. Click the Address Book button on the toolbar.
2. Click the New Entry button on the toolbar.
3. In the Put this entry panel, click the In the list arrow and select Personal Address Book.
4. Select Personal Distribution List from the Select the entry type text box and click OK.
5. Type a name for the distribution list in the Name text box.
6. Click the Add/Remove Members button.
7. Find and double-click the names you want to add to the distribution list. Click OK when you're finished.
8. Close the Address Book.

Lesson 2-24: Deleting Contacts and Distribution Lists

Figure 2-41

You can easily delete contacts and distribution lists from the Address Book.

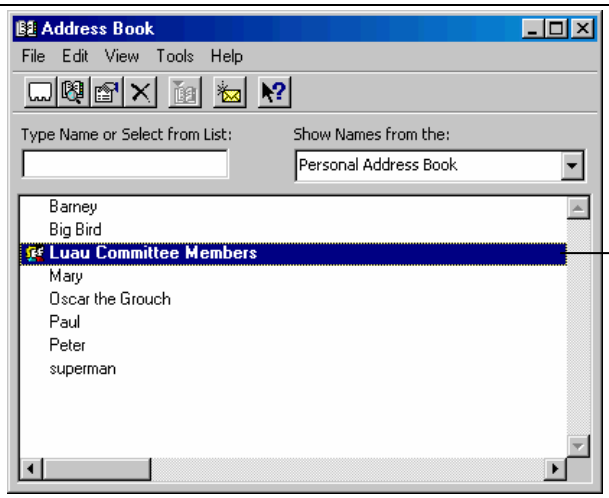
Figure 2-42

Outlook asks you to confirm any Address Book deletions.

IC3

Objective: 3.2.2.5

Req. File: None



To Delete a Contact: Select the name of the contact or distribution list and press the **<Delete>** key, or click the Delete button.

Figure 2-41

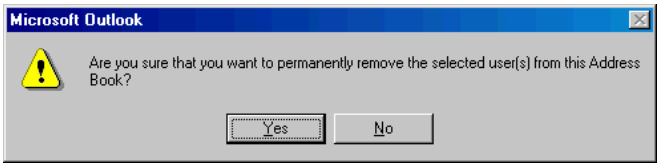


Figure 2-42

You can delete any entry from your Contacts folder or distribution list. Unless you're the corporate network administrator, however, you can't delete any Global Address List entries from the Address Book.

1. **Click the Address Book button on the toolbar.**

   The Address Book dialog box appears.

2. **Click the Show Names from the: list arrow and select Contacts.**

   The Address Book now displays only the entries contained in your Contacts folder. Deleting a contact is very easy.

3. **Find and select your name from the list, then click the Delete button on the toolbar.**

   Outlook asks you to confirm the deletion, as shown in Figure 2-42.

4. **Click Yes to confirm the deletion.**

   Outlook deletes your entry from the Contacts list.

   You delete distribution lists just as easily. Let's try it.

5. **Click the Show Names from the: list arrow and select Contacts.**

   The Address Book now displays only entries from your Contacts list. Deleting a distribution list is very easy.

Delete button

Other Ways to Delete a Distribution List or Contact:

- Select the contact or distribution list and press the <Delete> key.

© 2005 CustomGuide, Inc.

6. **Find and select the Luau Committee Members distribution list from the Contacts list and click the Delete button on the toolbar.**

   Once again, you need to confirm the deletion.

7. **Click Yes to confirm the deletion.**

   Outlook deletes the Luau Committee Members distribution list from the Address Book and the Contacts list without affecting any of its members' individual contact information.

8. **Close the Address Book.**

Quick Reference

To Delete a Contact or Distribution List:

1. Click the Address Book button on the toolbar.
2. Find and select the contact or distribution list you want to delete.
3. Click the Delete button on the toolbar.

   Or…

   Press <Delete>.
4. Click Yes to confirm the deletion.
5. Close the Address Book window.

Lesson 2-25: Sending a Message Using the Address Book

Figure 2-43

A new e-mail message being sent to a distribution list.

IC3

Objective: 3.2.2.5

Req. File: None

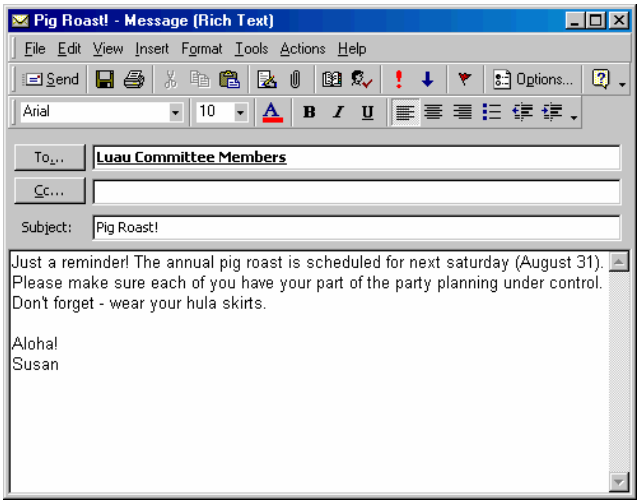


Figure 2-43

You learned in a previous lesson that distribution lists are used to send an e-mail message to each member of a group in a single mailing. You can use distribution lists to quickly send e-mails to all employees in the same department or organization, members on the same project or committee, or generic messages to a group of friends (such as a humorous e-mail).

Distribution lists show up as items in your Address Book and Contacts list, just like a person's name. You can use a distribution list to address an e-mail message just as you would with any contact.

Quick Reference

To Send a Message Using the Address Book:

1. Click the New Mail Message button.
2. Click the To button.
3. Click the Show Names from the list arrow and select Contacts if necessary.
4. Click the name of any distribution list in the Name list and click the To button. Click OK.
5. Click the Send button to send the message.

1. **Make sure that you are in the Inbox – click the Inbox button on the Outlook Bar if you're not.**

   The Inbox View appears.

2. **Click the New Mail Message button.**

   An Untitled – Message form appears, as shown in Figure 2-43, ready for you to enter a new message. First, you need to specify the recipient's e-mail address in the To field.

3. **Click the To button.**

   The Select Names dialog box appears.

4. **Click the Show Names from the list arrow and select Contacts if necessary.**

   This will display the distribution lists in the Contacts folder.

5. **Click the name of any distribution list in the Name list then click the To button. Then click OK.**

   If you actually wanted to send this message to everyone in the distribution list, you would click the Send button. We don't really need this e-mail, so go ahead and close it.

6. **Click the Message window's Close button and click No when it asks if you want to save your changes.**

© 2005 CustomGuide, Inc.

Lesson 2-26: Using the Out of Office Assistant

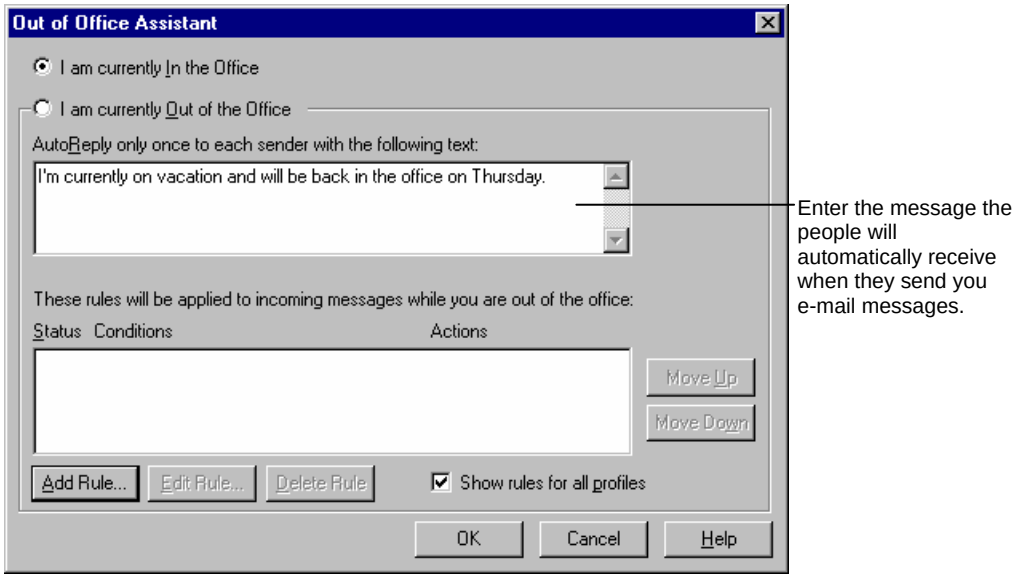


Figure 2-44

Figure 2-44

The Out of Office Assistant.

IC3

Objective: 3.2.2.6

Req. File: None

So you're finally taking that much-deserved vacation and going to Mexico next week? Congratulations! Before you leave, you should set up the Out of Office Assistant to notify other people that you will be out of the office for the next few days. When other users send you e-mail messages, they will automatically receive the out-of-office message that you created. The Out of Office Assistant is another Outlook feature that only works in a workgroup environment—so if you use Outlook in an Internet-only environment, you're out of luck—there's no Out of Office Assistant.

In this lesson, you will learn how to set up the Out of Office Assistant.

1. Select Tools → Out Of Office Assistant from the menu.

The Out Of Office Assistant dialog box appears, as shown in Figure 2-44.

2. Select the I am currently Out of the Office option.

Now you have to specify the message people will automatically receive when they send you e-mail messages.

3. Click in the AutoReply only once to each sender with the following text box and type your message.

For example, you might type something like "I will be out of the office from February 1st through February 10th. If you have any questions about the new network server, please contact my assistant Bob at extension x3081." When you're finished, move on to the next step.

4. Click OK.

So how do you turn off the Out of Office Assistant? Easy—the next time you start Microsoft Outlook, a dialog box will appear, asking you if you want to turn the Out of Office Assistant off. Simply click Yes to deactivate the Out of Office Assistant.

Quick Reference

To Set Up the Out of Office Assistant:

1. Select Tools → Out of Office Assistant from the menu.
2. Select the I am currently Out of the Office option.
3. Click in the appropriate text box and type your message.
4. Click OK.

Lesson 2-27: Changing the Message Format

Figure 2-45

Font and paragraph formatting aren't available for messages in Plain Text format.

Figure 2-46

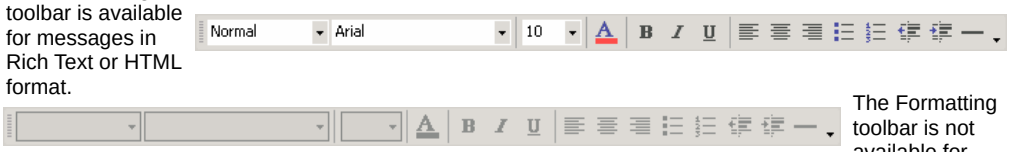
You can change the default message format by selecting Tools → Options from the menu, clicking the Mail Format tab, and selecting the message format.

IC3

Objective: 3.2.2.6, 3.2.3.2 and 3.2.3.3

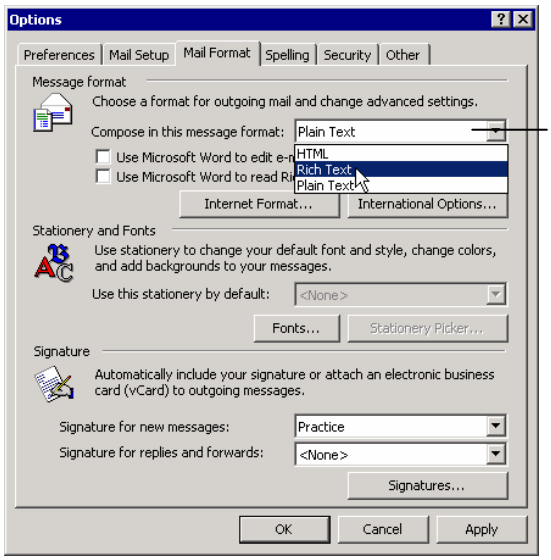
Req. File: None

The Formatting toolbar is available for messages in Rich Text or HTML format.



The Formatting toolbar is not available for messages in Plain Text format.

Figure 2-45



Select the e-mail format you want to use for new messages. See Table 2-9: Available Message Formats for a description of each of the available options.

Figure 2-46

People in different countries speak different languages, so it makes sense that e-mail programs use and understand different types of message formats. And, just like some people can speak more than one language, many e-mail programs—including Microsoft Outlook—can read and write in different message formats. Microsoft Outlook is actually somewhat of a linguist expert and can create messages in four different formats, as shown in Table 2-9: *Available Message Formats*.

More complex message formats, such as Microsoft Word format, have more formatting options but are less likely to be understood by some e-mail programs. Less complex message formats have fewer formatting options but are recognized by more e-mail programs.

Some common problems caused by using the wrong message format include:

- Not being able to format a message
- Not being able to use stationery or images in a message
- Messages not being understood by the recipient's e-mail program

So which of the formats listed in Table 2-9: *Available Message Formats* should you use? That's a decision you'll have to make, depending on which formatting features are important to you and who you send your e-mail messages to.

© 2005 CustomGuide, Inc.

1. Select Tools → Options from the menu and click the Mail Format tab.

The Options dialog box appears, as shown in Figure 2-46.

2. Click the Compose in this message format: list arrow.

This list contains the formats you can use to create your new messages. Table 2-9: *Available Message Formats* gives a detailed description of each of these messages, including the formatting features and the pros and cons of using it. For now you can leave the message format as it is.

3. Close the Options dialog box.

Here's some information about the various message formats available to Microsoft Outlook:

Table 2-9: Available Message Formats

Format	*Description*
HTML	HTML (Hypertext Markup Language) is the same language that is used to create web pages. HTML gives you many formatting options and is compatible with most e-mail programs. Formatting Options Available: Text and paragraph formatting, numbering, bullets, alignment, horizontal lines, backgrounds, HTML styles, and Web pages. Pros: Compatible with most e-mail programs. Cons: Older e-mail programs may not recognize HTML formatted messages.
Microsoft Outlook Rich Text	Microsoft Outlook Rich Text is a good in-between message format that has a moderate amount of text formatting and compatible with virtually all e-mail programs. Formatting Options Available: Text formatting, alignment, and bullets Pros: Compatible with most e-mail programs. Cons: Older e-mail programs may not recognize these formatted messages.
Plain Text	Plain Text is the most compatible message format and can be understood by virtually all e-mail programs—even much older ones. Because Plain Text messages have no formatting options, the Formatting toolbar is disabled when you're working with them. Formatting Options Available: None Pros: Universally understood by all e-mail programs. Cons: No formatting options.
Microsoft Word	This format lets you use Microsoft Word—a very powerful word processor—to compose your e-mails as Microsoft Word documents. This option gives you the most formatting options and lets you use Microsoft Word's powerful features. The downside? Microsoft Word messages are the least compatible format and cannot be understood by many e-mail programs. Unless you only use Outlook for internal office use, you're probably better off using a different format. Formatting Options Available: All formatting available to Microsoft Word documents, such as tables, WordArt objects, and more. Pros: Lets you take advantage of Microsoft Word's powerful features and provides the most formatting options. Cons: Many e-mail programs cannot understand messages in Microsoft Word format.

Quick Reference

To Change the Message Format:

1. Select Tools → Options from the menu and click the Mail Format tab.
2. Click the Compose in this message format: arrow and select the desired message format.
3. Click OK.

Lesson 2-28: Understanding the Advantages of Web-based E-mail

Figure 2-47

Many people prefer to use Web-based e-mail, such as Hotmail, since you can use it anywhere on any computer that has a connection to the Internet.

IC3

Objective: 3.2.3.1

Req. File: None

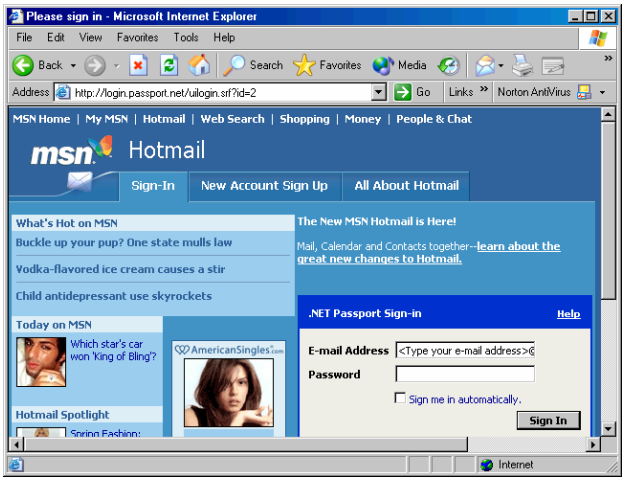


Figure 2-47

There are tons of advantages to using e-mail. In fact, there are too many to list in a single lesson. However, there are three key advantages that every Web-based e-mail user should be aware of: speed of delivery, low cost, and accessibility.

Speed of Delivery

When compared to other methods of communication, such as postal mail, e-mail is much faster! In fact, when you send an e-mail, it reaches its destination almost instantaneously. Whether you're sending an e-mail to the co-worker in the cubical next to yours, or to your sister who is vacationing in Australia, the time of delivery will be the same.

Low Cost

If you are concerned about having to pay for an e-mail program in order to send and receive e-mail messages, set those feelings aside. If you're connected to the Internet and have a Web browser, you don't even need an e-mail application to send and receive messages – you can do it right from the Web! Web-based e-mail is usually free, and it allows you to compose, send, and receive e-mail messages using a Web page instead of an e-mail program.

Accessibility

Your e-mail is easy to access if you're using Web-based e-mail. In fact, many people prefer to use Web-based e-mail instead of an e-mail program because it's free and can be accessed anywhere that there is a computer with an Internet connection. Hotmail, as shown in Figure 2-47, owned by Microsoft (who else?), is the largest Web-based e-mail program in the world. Other examples of Web-based e-mail programs include Yahoo!, Fastmail, and Netscape.

If you're looking to purchase an e-mail application, you have lots of choices. Although we'll be working with Microsoft Outlook throughout the duration of this chapter, Outlook is by no means the only program you can use to send and receive e-mail. There are many different e-mail programs that can send and receive e-mail, such as GroupWise, Lotus Notes, and America Online (AOL). And remember – there is always the option of using Web-based e-mail.

So you already know the basics regarding e-mail, but how should an e-mail message be composed? Move on to the next lesson to find out!

Quick Reference

Understanding the Advantages of E-mail:

- E-mail is fast. In fact, it reaches its destination almost instantaneously.
- Most Web-based e-mail is free, and it allows you to compose, send, and receive e-mail messages using a Web page instead of an e-mail application.
- Web-based e-mail can be accessed anywhere there is a computer with an Internet connection.

© 2005 CustomGuide, Inc.

Lesson 2-29: Understanding Network Etiquette

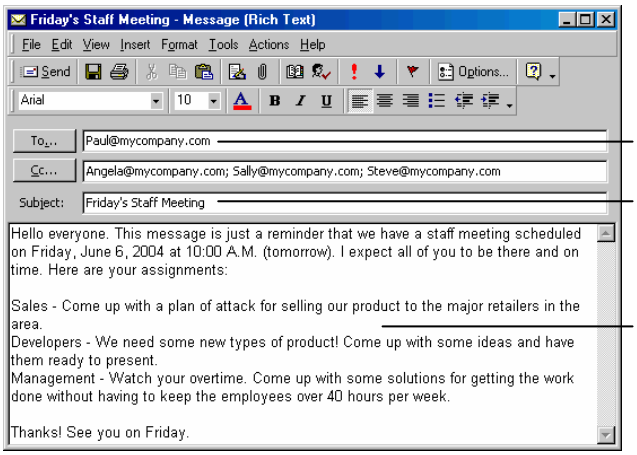


Figure 2-48

Figure 2-48

An example of an e-mail message composed using good *netiquette.*

IC3

Objective: 3.2.3.3, 3.2.3.2, and 3.2.3.8

Req. File: None

E-mail has evolved as a unique communication medium that combines the formality of a letter and the informality of a telephone call. Despite its informal approach, communicating via e-mail is no excuse for a lack of professionalism. Messages should follow the same guidelines as correspondence via written mail, possessing an appropriate level of formality based on its content.

To show good network etiquette, or *netiquette*, keep the following in mind as you write your messages:

Accurate Subject Fields

Subject fields need to be accurate. You want the receiver to know what they are going to read, and how urgent the message may be, before they even open it. For example, let's say you are going to send your employees an e-mail regarding tomorrow's staff meeting. There are staff meetings scheduled for Tuesday and Thursday as well. If you just enter "Meeting" into the Subject field of your e-mail, the receivers will not be aware that this particular e-mail is regarding the meeting scheduled for tomorrow. It can't be stressed enough that being articulate within your Subject fields is important.

Be Brief

When you create or respond to an e-mail, be brief. It is much easier for the receiver to glance over two sentences versus two pages. For example, if a coworker sends you a message asking what time the meeting is scheduled for tomorrow, don't send an annotated version of your schedule for the week along with wishes for a good day. Simply respond politely and succinctly with the time and place of the staff meeting. It is also important to be aware of the tone your messages exude. Using all capitals to emphasize a point should be avoided, as it appears as "SHOUTING" to the recipient.

Check Your Spelling

It is imperative that your e-mail messages stay free from spelling errors. Not only is it unprofessional, but spelling errors could cause confusion as to the actual meaning of your message. It is also important to remember that while most e-mail applications come with a spell checker, it will not catch *all* spelling errors.

Quick Reference

Understanding Network Etiquette:

- Subject fields need to be accurate so that the receiver is aware of the urgency and the subject of a message before they even open it.
- Be brief with e-mail responses. It is much easier for a receiver to glance over a two-sentence response versus a two-page one.
- Check spelling so that your e-mail appears more professional, and to prevent confusion.

Lesson 2-30: Understanding Unsolicited E-mail

Figure 2-49

You may feel overwhelmed by the amount of junk e-mail you receive on a daily basis.

Figure 2-50

Some examples of Spam.

IC3

Objective: 3.2.3.7, 3.2.2.6, 3.2.3.8, and 3.2.3.2

Req. File: None

Figure 2-49

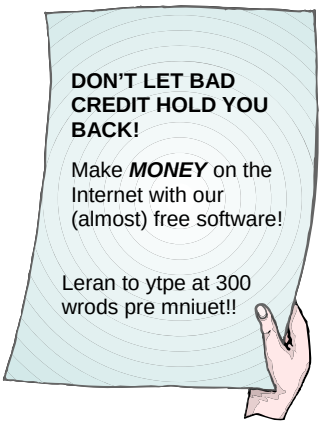


Figure 2-50

Isn't it nice when you open your Inbox in the morning and find important e-mail messages like the ones in Figure 2-50 waiting for you? Probably not. These are all examples of Spam. Spam is, quite easily, one of the most annoying aspects of e-mail.

What is Spam?

If the e-mail meets both of the following criteria, it can be defined as Spam.

- **The e-mail message was unsolicited:** This means that the message was sent to you even though you never asked for it. Usually, Spams are sent in an effort to get you to buy a particular product or service. Most, but not all, Spams are commercial in nature.

  Not all unsolicited e-mails are Spam. Your long-lost friend from preschool in Kansas could send you an e-mail trying to get back in touch. You would certainly not want this e-mail classified as Spam simply because you didn't solicit it. Therefore, there must be another criterion by which to define Spam.

- **The e-mail message was sent in bulk and without discrimination:** If this message was sent to a large group of random people, it is most likely Spam. Spammers do not discriminate to whom their junk mail is sent. They will send to anyone and everyone in an attempt to earn a sale.

  Your friend obviously did not send her e-mail to a large group of people. Therefore, the e-mail message does not meet both criteria and should not be classified as Spam.

Quick Reference

Understanding Spam:

- Spam is an unsolicited e-mail that was sent in bulk and without discrimination.
- Most Spams are commercial in nature.
- Most e-mail applications on the market these days contain features that allow you to filter e-mail content or block the sender

How can you prevent Spam?

It is almost impossible to prevent businesses and other organizations from sending you Spam. However, most e-mail programs on the market nowadays include some sort of a junk mail filter or encryption software. While these filters cannot repel Spam, they can most certainly keep it away from your Inbox. Unfortunately most of these filters prove to be quite ineffective, simply because they are based on a limited lexicon. If a Spammer uses different vocabulary than you might expect to find in a Spam, the filter will allow it into your Inbox.

Luckily, there is another anti-Spam feature in most e-mail applications. They allow you to create a junk mail sender's list. When you add a name to this list, that person can no longer send you e-mails, junk or not. Adding a name to a junk mail sender's list is like telling your postal worker, "Don't deliver any more mail from Publisher's Clearing House."

© 2005 CustomGuide, Inc.

Lesson 2-31: Computer Viruses

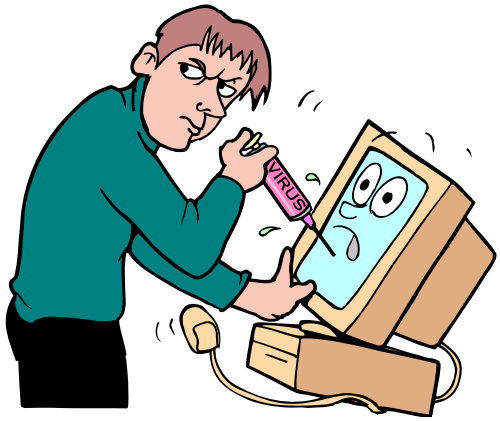


Figure 2-51

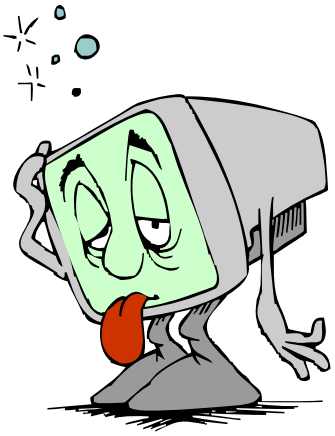


Figure 2-52

Figure 2-51

Malicious programmers create viruses that infect computers.

Figure 2-52

Computers are unresponsive and inefficient when infected with a virus.

IC3

Objective: 3.2.3.7, 3.2.3.8, and 3.2.3.2

What is a virus?
The average keyboard has thousands of germs on it, but that's not how computers get viruses. A computer virus is a small computer program created by a malicious programmer for the purpose of damaging other computers. When viruses become installed on a computer, the computer is infected and the virus carries out the damage it is programmed to do.

There are many different types of viruses. Most viruses attack computer hard drives by erasing data and damaging system files, but programmers can write the virus to do anything they want. If your computer isn't working the way it usually does, you have probably been infected with a virus.

One of the most devastating effects of a virus is that the virus often has the ability to spread from computer to computer. The most malicious viruses—such as the "I Love You" and "Melissa" viruses—have caused billions of dollars in damage worldwide.

How are viruses spread?
The most damaging computer viruses are programmed with the ability to reproduce and infect more computers. Many viruses invade computers through e-mail programs by riding the backs of e-mail messages, or through networks and file sharing. Viruses can also be found in storage devices like diskettes, CD-ROMs, or zip disks. The Internet is a host to many viruses as well.

What can I do to prevent a virus?
Good judgement is the first line of defense against a virus. Installing anti-virus software on your computer will keep out most viruses, but you can do a lot to prevent contracting a virus as well. Here are a few guidelines to keep in mind:

- Do **use an anti-virus program.** Installing an anti-virus software program on your computer is a must if you are going to be working on the Internet.
- **Don't post your e-mail address in a public place.** Once a spammer gets a hold of your e-mail, it's almost impossible to avoid receiving unsolicited e-mails that may or may not contain a virus.
- **Don't open messages from unknown senders.** Viruses are often sent through e-mail messages. If you don't know the sender, don't open the message.

Quick Reference

Understanding Viruses:

- A virus is a small computer program created by a malicious programmer for the purpose of damaging other computers.
- Most viruses are programmed to reproduce and infect other computers through file sharing, networks, or e-mail messages.
- The best way to prevent a virus infection is to install a virus-scanning program on your computer, so viruses are detected before they attack your computer.
- You are the first line of defense against viruses: don't open messages or attachments that are unrecognizable.

- **Don't open attachments from unknown senders.** A virus has to be opened to install itself on your computer. Even if the sender is familiar, think twice before opening the attachment.

© 2005 CustomGuide, Inc.

Chapter Two Review

Lesson Summary

Understanding E-mail Addresses

- User Name: The User Name refers to the name of the person's e-mail account.
- Domain Name: The Domain Name, also known as the Host Name, refers to the location of the person's account on the Internet.
- Top Level Domain (TLD): The TLD refers to the type of organization, or the country, where the person's e-mail account is located.

Composing and Sending E-mail

- To Compose a Message: Click the Inbox button on the Outlook Bar and click the New Mail Message on the toolbar. Type the recipient's address in the To: field, or click the To button to the left of the To text box, choose the name of the recipient from the Name list, and then click the To button. Click the Subject text box and enter the message's subject, click the pointer in the lower pane, and type the message. Click the Send button on the toolbar to send the message.

Specifying Message Options

- To Specify Message Options: Click the New Mail Message button on the toolbar and create the message. Click the Options button, specify the message options, and click OK.
- To Mark a Message as Urgent: Click the Importance: High button on the toolbar.

Opening and Closing an E-mail Message

- To Receive and Read E-mail Messages: Click the Inbox button on the Outlook bar. Click the Send and Receive button on the toolbar. Click or double-click the message you want to read. Or, select File → Open from the menu.
- To Close an E-mail Message: Click the Message window's Close button. Or, select File → Close from the menu.
- Things you can do with an E-mail Message: Reply to the message; forward the message; view or download any attachments; print the message; delete the message; move the message to a different folder; and ignore the message.

Replying to a Message

- To Reply to a Message: Find and open the message you want to reply to, and then click the reply option you want to use:
  Reply sends the reply only to the author of the message.
  Reply to All sends the reply to everyone who received the message.
  Type your reply and click the Send button on the toolbar when you're finished.
- To Delete the Original Message Copy: Select the original message text and press the <Delete> key.

Forwarding a Message

- To Forward a Message: Find and select the message you want to forward and click the Forward Message button on the toolbar. Enter the recipient's e-mail address in the To field. (Optional) Enter your own comments in the message body area. Click the Send button on the toolbar.

Finding Messages

- To Find a Message: Click the Find button on the toolbar, or select Tools → Find from the menu. Enter the text you want to search for in the Look for text box. Check the Search all text in the message check box to search the actual text of your e-mail messages. Click the Find Now button.

Sorting Messages

- To Sort Messages: Click the column heading you want to use to sort the Inbox.

Attaching and Deleting a File

- To Attach a File to an E-mail Message: Click the New Mail Message on the toolbar and create the message. Click the Insert File button on the toolbar or select Insert → File from the menu. Browse to, find, and double-click the file you want to attach.
- To Delete an Attachment from an E-mail Message: Select the attachment and press the <Delete> key.

Opening and Saving an Attachment

- To Open an Attachment in Preview Mode: Click the paper clip icon, select the attachment you want to view, select Open it, and click OK.
- To Open an Attachment in the Message Form: Open the e-mail by double-clicking it and then double-click the attachment you want to view.
- To Save an Attachment to Your Hard Disk in Preview Mode: Click the paper clip icon, select the attachment you want to view, select Save it to disk, and click OK. Specify a file name and location for the attachment and click OK.
- To Save an Attachment to Your Hard Disk in the Message Form: Open the E-mail by double-clicking it. Then right-click the attachment and select Save As from the shortcut menu. Specify a file name and location for the attachment and click OK.

Managing E-mail Effectively

- Use folders to organize your Inbox so you don't have to sift through a plethora of unrelated e-mail messages in order to find the one you are actually looking for.
- Delete unimportant e-mail messages immediately so they don't clutter your Inbox.
- Use the Address Book and distribution lists to keep your contact information current and organized.

Creating a Folder

- To Create a New Folder: Right-click anywhere in the Folder List and select New Folder from the shortcut menu. Or, select File → New → Folder from the menu. Enter the folder's name in the Name text box. Specify what you want to keep in the new folder by making a selection from the Folder contains list. Specify where you want to keep the new folder by clicking the appropriate folder's icon. Click OK.

© 2005 CustomGuide, Inc.

Renaming, Copying, Moving, and Deleting a Folder

- To Lock the Folder List in Place: Open the Folder List by clicking the Folder Banner or by selecting View → Folder List from the menu, then click the thumbtack button.
- To Rename a Folder: Right-click the folder, select Rename from the shortcut menu, and enter the new name.
- To Delete a Folder: Select the folder you want to delete, press <Delete>, and click Yes to confirm the deletion.
- To Move a Folder: Click and drag the folder to the desired location.

Selecting One or More Mail Messages

- To Select Several Consecutive Items: Click the Inbox button on the Outlook bar. Click the first message you want to select, press and hold down the <Shift> key, and click the last message you want to select.
- To Select Several Nonconsecutive Items: Click the Inbox button on the Outlook bar. Press the <Ctrl> key as you click each item that you want to select.

Deleting Messages

- To Delete a Message: Select the message and click the Delete button on the toolbar. Or, select the message and press the <Delete> key.
- To View Deleted Items: Click the Deleted Items button on the Outlook Bar.
- To Empty the Deleted Items Folder: Right-click the Deleted Items button on the Outlook Bar, select Empty "Deleted Items" Folder from the shortcut menu and click Yes to confirm the deletion.

Marking E-mail Messages as Read or Unread

- To Mark an E-mail Message as Read or Unread: Select an e-mail message from the Inbox. Select Edit from the menu and then choose an e-mail message status option. Or, right-click the e-mail message whose status you want to change and then select an e-mail message status option from the shortcut menu.

Flagging Items

- To Flag an Item: Right-click the item and select Flag for Follow Up from the shortcut menu. Click the Flag to list arrow and select a category. (Optional) Click the Due by list arrow and select the day you want to be reminded of the flagged item. Click OK.

Exporting Information

- To Export Information: Select File → Import and Export from the menu. Select the Export to a file option from the list and click Next. Select the desired file format from the list and click Next. Select the folder whose data you want to export and click Next. Specify the name and folder where you want to save the exported information, click the Export box, and click Finish.

Manually Archiving Information

- To Manually Archive Items: Select File → Archive from the menu. Ensure the Archive This Folder and all subfolders option is selected, and then select the folder that you want to archive. Click the Archive items older than arrow and select the date to specify how old items must be in order to be archived. (Optional) Specify the name and folder of the archive file in the Archive File box. Click OK to archive the folder(s).

Adding New Address Book Entries

- To Add an Entry to the Address Book: Click the Address Book button on the toolbar. Click the New button on the toolbar. Then, select the type of contact you want to enter and which address book you want to enter it into. Enter the desired information about the contact. Click OK and close the Address Book window.

Adding and Updating Contacts Using E-mail Messages

- To Add or Update an Address Book Entry Using E-mail Messages: Select any message from your Inbox that contains the contact information that you want to add to the Address Book. Click and drag the e-mail message to the Contacts icon on the Outlook Bar. Then, release the mouse button. Enter any additional information about the contact in the New Contact dialog box. Click the Save and Close button on the toolbar. If necessary, make a selection in the Duplicate Contact Detected dialog box and click OK.

Creating a Distribution List

- To Create a Distribution List: Click the Address Book button on the toolbar. Click the New Entry button on the toolbar. In the Put this entry panel, click the In the list arrow and select Personal Address Book. Select Personal Distribution List from the Select the entry type text box and click OK. Type a name for the distribution list in the Name text box. Click the Add/Remove Members button. Find and double-click the names you want to add to the distribution list. Click OK when you're finished. Close the Address Book.

Deleting Contacts and Distribution Lists

- To Delete a Contact or Distribution List: Click the Address Book button on the toolbar. Find and select the contact or distribution list you want to delete. Click the Delete button on the toolbar, or press the <Delete> key. Click Yes to confirm the deletion. Close the Address Book window.

Sending a Message Using the Address Book

- To Send an E-mail Message Using the Address Book: Click the New Mail Message button. Click the To button. Click the Show Names from the arrow and select Personal Address Book if necessary. Click the name of any distribution list in the Name list and click the To button. Then, click OK. Click the Send button to send the message.

Using the Out of Office Assistant

- To Use the Out of Office Assistant: Select Tools → Out Of Office Assistant from the menu. Select the I am currently Out of the Office option. Click in the appropriate text box and type your message, then click OK.

Changing the Message Format

- To Change the Message Format: Select Tools → Options from the menu and click the Mail Format tab. Click the Compose in this Message format: arrow and select the desired message format. Click OK.

© 2005 CustomGuide, Inc.

Understanding the Advantages of Web-based E-mail

- E-mail is fast. In fact, it reaches the destination almost instantaneously.
- Most Web based e-mail is free, and it allows you to compose, send, and receive e-mail messages using a Web page instead of an e-mail application.
- Web based e-mail can be accessed anywhere there is a computer with an Internet connection.

Understanding Network Etiquette

- Subject fields need to be accurate so that the receiver is aware of the urgency and the subject of a message before they even open it.
- Be brief with e-mail responses. It is much easier for a receiver to glance over a two-sentence response versus a two-page one.
- Check that everything in your e-mail is spelled correctly so that it appears more professional and to prevent confusion.

Understanding Unsolicited E-mail

- Spam is an unsolicited e-mail that was sent in bulk and without discrimination.
- Most Spams are commercial in nature.
- Most e-mail applications on the market these days contain features that allow you to filter e-mail content or to block the sender.

Understanding Viruses

- A virus is a small computer program created by a malicious programmer for the purpose of damaging other computers.
- Most viruses are programmed to reproduce and infect more computers through file sharing, networks, or e-mail messages.
- The best way to prevent a virus infection is to install a virus-scanning program on your computer, so that viruses are detected before they attack your computer.

Quiz

1. Which of the following is NOT a part of an e-mail address?

A. Domain Name
B. Network Name
C. Top Level Domain (TLD)
D. User Name

2. To reply to a message, click the Forward button on the toolbar. (True or False?)

3. You've just received an e-mail entitled "I Love You!" from someone you don't know. The message has an attachment. What do you do?

A. Open the attachment immediately and see what it is!
B. Forward the e-mail to your significant other to show them that at least other people appreciate you.
C. The e-mail may likely contain a virus, so treat the e-mail and its attachment with extreme caution. Either delete it or save it to your hard disk but ONLY if you have an up-to-date anti-virus program installed.
D. Pull the personal ad you posted last month from the Internet.

4. Which of the following does NOT describe a distribution list?

A. You should use a distribution list to sent an e-mail message to each member of a group in a single mailing.
B. You should use a distribution list to send a humorous e-mail to a group of friends.
C. You should use a distribution list to address an e-mail message just as you would with an individual contact.
D. You should use a distribution list to send an e-mail to your mother-in-law.

5. Which of the following are ways to find an e-mail message? (Select all that apply.)

A. Click the Find button on the toolbar.
B. Click the New Mail Message button on the toolbar.
C. Select Tools → Find from the menu.
D. Select Edit → Find Message from the menu.

6. When you receive an unimportant e-mail message, you should:

A. Keep it in your Inbox.
B. Move it to your "Important" folder.
C. Delete it.
D. Forward it to all of your friends.

© 2005 CustomGuide, Inc.

7. Which of the following is an advantage of e-mail?

A. Low Cost
B. Accessibility
C. Speed of Delivery
D. All of the above are advantages of e-mail

8. It is not important to use good network etiquette when composing an e-mail. (True or False?)

9. Most Spams are commercial in nature. (True or False?)

10. Which of the following is a method for marking an e-mail message as read or unread? (Select all that apply.)

A. Select File → Message Status from the menu.
B. Select Edit from the menu and then choose an e-mail message status option.
C. Right-click an e-mail message and choose a status option from the shortcut menu.
D. Double-click an e-mail message and choose a status option from the shortcut menu.

Homework

1. Start Microsoft Outlook.
2. Open the Inbox by clicking the Inbox button on the Outlook bar.
3. Create a new e-mail message using the following information:
   To: (your own e-mail address)
   Subject: Outlook Homework
4. Send the e-mail message.
5. Check to see if you have any new e-mail messages by clicking the Send and Receive button.
6. Add a new entry to your Address Book.
7. Create a distribution list named "Friends."
8. Add at least three entries to the Friends distribution list.
9. Sort the contents of your Inbox by Subject.
10. Close the Microsoft Outlook program.

Quiz Answers

1. B. Network Name is not part of an e-mail address.
2. False. You reply to a message by clicking the Reply button on the toolbar, of course.
3. C. While an e-mail titled "I Love You" with an attachment *could* come from a secret admirer, it's much more likely that it contains virus. Either delete the message or save the file to your hard disk, but ONLY if you have an up-to-date anti-virus program installed.
4. D. Distribution lists are meant to be used to send one e-mail message to every member of a group, not to send an e-mail message to an individual.

5. A and C. To find a message, either click the Find button on the toolbar, or select Tools → Find from the menu.
6. C. Any e-mail message that you do not need should be deleted immediately.
7. D. Speed of delivery, low cost, and accessibility are all advantages of using e-mail.
8. False. It is very important to use good network etiquette when composing and sending e-mail.
9. True. Most Spams that are sent out are in an attempt to get you to buy a product or service.
10. B and C. You can mark a message as read or unread either by right-clicking the message and selecting a status from the shortcut menu, or by selecting Edit from the menu and then choosing a status option from the menu.

© 2005 CustomGuide, Inc.

Chapter Three: Using the Internet

Chapter Objectives:

- **Understand key terms**
- **Understand Web browsers and addresses**
- **Understand protected Web sites and information quality**
- **Display a specific Web page**
- **Navigate a Web site and use hyperlinks**
- **Display and delete a history of visited Web pages**
- **Add a Web page to Favorites**
- **Save Web pages for offline viewing**
- **Copy and paste images, URLs, and text**
- **Preview and Print a Web page**
- **Download images and files**
- **Change your Home page**
- **Use a search engine**

☑ Prerequisites

- How to use the mouse to click, double-click, drag and drop, and right-click.
- How to use menus, toolbars, and dialog boxes.
- How to start programs in the Start menu.

Unless you've been living on a deserted island for the past five years, you already know that the Internet is the biggest thing to happen to computers since…well, computers! You can't ignore it – the Internet is not going away and it's already changing the world we live in. Fortunately, for the most part, the Internet is incredibly easy to use. Even the most computer-phobic users seem to feel right at home on the Internet.

This chapter explains the ins and outs of the Internet. If you've ever spent a sleepless night wondering exactly what the Internet is and how to get started, you'll finally learn it all. You will learn many useful terms, such as cookie, cache, HTTP, and FTP; how to navigate to a specific Web address; how to activate a hyperlink within that address; how to work with Favorites; and more!

By the end of this chapter, you'll be surfing the big waves of the World Wide Web like a pro!

Lesson 3-1: Understanding Key Terms

Figure 3-1

The Yahoo home page.

IC3

Objective: 3.3.1.1 and 3.3.1.3

Req. File: None

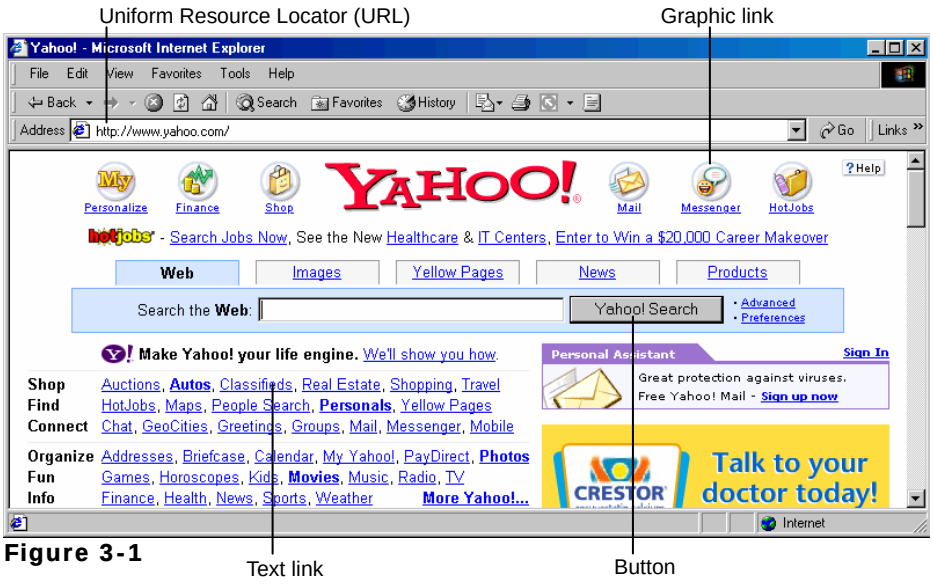


Figure 3-1

Before you start working on the World Wide Web, there are some key terms that you should familiarize yourself with. This lesson is only meant to help you get acquainted with frequently used World Wide Web jargon. Relax, you don't have to memorize anything! Reference Figure 3-1 as you work your way through the following terms:

Table 3-1: Understanding Key Terms

Term	*Definition*
HTTP	HTTP stands for *Hypertext Transfer Protocol*. It is a set of rules for transferring files on the World Wide Web. HTTP files can be text, graphics, sound, video, or any other multimedia file type. HTTP works like this: your browser (for example, Microsoft Internet Explorer) sends an HTTP request to a server for a certain group of Web pages. The server receives this request and sends the page(s) back to your computer.
HTML	HTML stands for Hypertext Markup Language. It is a set of special codes referred to as "tags," that describe the general structure of various kinds of documents that are linked together on the World Wide Web.
URL	URL stands for *Uniform Resource Locator*. This is an address for a file that is located somewhere on the Internet. Each URL is unique to the Web page that it links to. URLs are structured so that they contain a protocol, domain name, resource, and extension. Don't worry about these terms for now, because URLs will be covered more extensively in another lesson.
Hyperlink	A *hyperlink* is a link from one word or image to another. Most commonly, a hyperlink will appear on a page as a blue underlined word or phrase (as seen in Figure 3-1), but they can also be images or animations. To use a hyperlink, you simply click on it with your mouse and it will instantly take you to the destination.

© 2005 CustomGuide, Inc.

Term	*Definition*
ISP	ISP stands for *Internet Service Provider*. An ISP is a lot like a phone company, except instead of letting you make telephone calls to other people, an Internet Service Provider lets your computer connect to the Internet. Just like your telephone company, Internet Service Providers charge for their services – currently, the average rate seems to be about $20 per month for unlimited usage. You've probably already heard of the most famous Internet Service Provider – America Online, or AOL.
Plug-in	A plug-in is a small piece of software that enriches a larger piece of software by adding features or functions. For example, a plug-in extends the capabilities of a Web browser, such as Microsoft Internet Explorer, by allowing the browser to run multimedia files.
FTP	FTP stands for *File Transfer Protocol*. Much like HTTP, FTP is a set of rules for transferring files on the World Wide Web. FTP is commonly used to transfer Web page files from the Web page developer's computer to the Web server. FTP is also used to download files to your computer from another server.
Cookie	A *cookie* consists of one or more pieces of information that are stored as text files on your computer. A Web server sends the cookie and the browser stores it. Each time the page is referenced, the browser resends the cookie to the original server. Cookies are most commonly used to store frequently used information, such as user ID numbers. They are not harmful, as their rotten reputation implies. They cannot transmit viruses, nor can they take any information from your computer back to the server. In fact, cookies can be helpful because they allow a server to recall any user-specific information.
Cache	You automatically request files when you look at a Web page. These files are stored in a cache. A *cache* is simply a temporary storage place that is located in a subdirectory beneath the main directory for your browser. Caches are created so that when you return to a page that you have recently visited, the browser can get the page from the cache, rather than going back to the server. This saves time and reduces the amount of Internet traffic. Most Web browsers will allow you to manipulate the size of your cache.
Encryption	When you encrypt something, you are putting it into a code that only authorized people can understand. This prevents unauthorized users from accessing personal or confidential information.
Firewall	A *firewall* is a group of related programs that protect a private network from users from other networks. Basically, a firewall screens all incoming information before sending it off to its intended destination so the network stays secure - free from hackers, viruses, and any other types of security breaches.

Lesson 3-2: Understanding Web Browsers

Figure 3-2

Using Microsoft Internet Explorer to display the MSN Home page.

IC3

Objective: 3.3.1.1, 3.3.1.2, and 3.3.2.12

Req. File: None

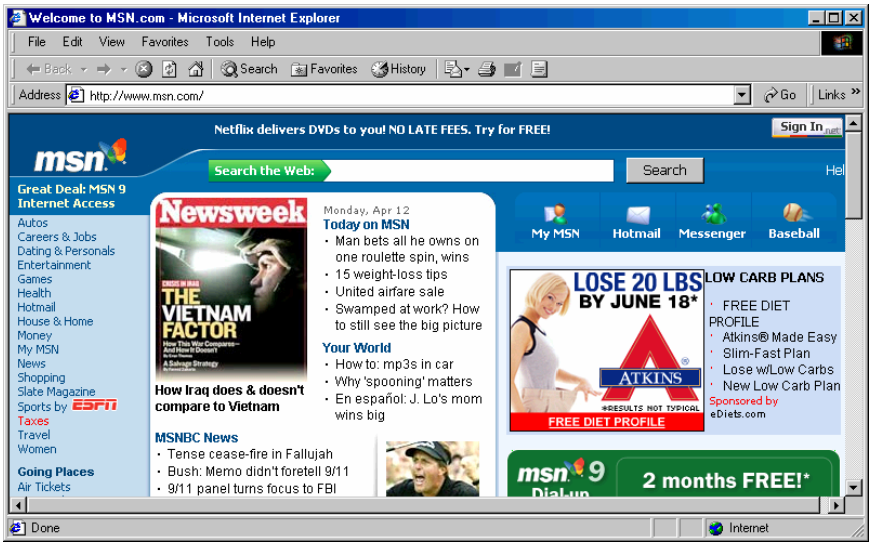


Figure 3-2

A Web browser is a software application that allows your computer to connect with, view, and navigate the World Wide Web. The Web browser is what finds, displays, and allows you to interact with and look at Web pages. Most Web browsers are *graphical* in nature, which means that they have the capability to show both text and images.

Why can't I see certain images with my browser?
Some browsers may have trouble showing certain images or text. Most of the time, this has to do with an out-of-date browser. For example, if you have an older version of Netscape Navigator, you may not be able to see graphics and animations created using Macromedia Flash. This is because the browser does not understand what these graphics are.

Why do annoying advertisements keep popping up while I am using my browser?
Pop-ups are annoying advertisements windows that disrupt your browsing on the Web. Depending on the security settings, these annoying pop-ups may or may not show up while you are browsing the Web. Newer versions of Web browsers contain a handy-dandy program called a pop-up blocker that does just that: blocks unwanted pop-up ads from cluttering your computer screen. Make sure your computer security settings are up to date, and, if you don't have a pop-up blocker, it would be in your best interest to install one.

What are some commonly used browsers?
Two of the most commonly used browsers are Internet Explorer (owned by Microsoft) and Netscape Navigator (owned by AOL). There are several other reputable browsers available for use. Take a look at Table 3-2: *Commonly Used Web Browsers* for more information.

© 2005 CustomGuide, Inc.

Table 3-2: Commonly Used Web Browsers

Web Browser	*Description*
Internet Explorer	Owned by Microsoft, the most popular browser on the market.
Netscape Navigator	Owned by AOL, Netscape comes in at a close second to Microsoft's Internet explorer.
Opera	Opera is an international Web browser that comes from Norway. It is new to the market and causing quite a stir with its popularity.
MSN Explorer	Microsoft combined features from Internet Explorer, Outlook Express, MSN Messenger, and Windows Media Player into one application.

Quick Reference

Understanding Web Browsers:

- A Web browser is a program that allows your computer to view and navigate the World Wide Web.
- If you are having trouble viewing certain images or animations with your browser, it means that your browser is not compatible with specific software applications or that the browser is simply out of date.
- The two most commonly used Web browsers are Microsoft's Internet Explorer and AOL's Netscape Navigator.

Lesson 3-3: Understanding Web Addresses

Figure 3-3

An example of a Web address, or URL.

IC3

Objective: 3.3.1.4 and 3.3.2.1

Req. File: None

Figure 3-3

Web addresses, also called URLs (*Uniform Resource Locators*), are the unique addresses for documents, Web sites, and other resources available for browsing and downloading on the World Wide Web. Once a Web page has been requested using a Web address, a *Web server* (a computer that contains the Web site or other resource) sends the pages back to the computer that made the request. Figure 3-3 is an example of what a typical Web address looks like.

Web addresses consist of four parts: a protocol, a domain name, a resource to be located, and an extension.

- **Protocol:** The protocol tells the server which type of resource you are trying to locate. The most common protocol is http://, or HyperText Transfer Protocol, as seen in Figure 3-3. This protocol tells the server that you are looking for a Web site. Most browsers assume that your are searching for a Web site, so when you type in the address you can usually leave the http:// out.
- **Domain Name:** The domain name is the address of the main Web page. The domain name indicates the company or individual that maintains the Web site. In our example, *www.customguide.com* indicates that CustomGuide, Inc. is the host of the site. Take a look at Table 3-4: *Commonly Used Domain Name Extensions* to familiarize yourself with the most common domain name extensions and the purposes for which they serve.
- **Resource:** A resource can be almost any computer-related item. You could be searching for a file, program, printer, disk drive, data, or memory. In Figure 3-3, the resource is computer_training. This indicates that this address belongs to the "About Us" portion of the CustomGuide, Inc. Web site.
- **Extension:** The extension indicates what type of code or program is running the Web site. In Figure 3-3, the extension is .htm. This is a standard extension that indicates the site is running on UNIX machines or on a PC using Microsoft Windows. Addresses with an .htm extension run only static pages – meaning the content cannot be manipulated.

That's all there is to a Web address. Pretty simple stuff, huh? Go ahead and take a look at the following table for some other examples of commonly used extensions.

Table 3-3: Examples of Commonly Used Extensions

Extension	*Description*
.html	This site is run on UNIX machines, or PCs using Microsoft Windows. Addresses with an .html extension run only static pages – the content cannot be manipulated.
.shtml	These sites are more flexible than .htm or .html sites. They contain tags that enable quick and easy changes to the content. In other words, these sites are not static.

© 2005 CustomGuide, Inc.

Different types of Web sites can be identified simply by looking at their extension. Take a look at the following table to familiarize yourself with the most common ones.

Table 3-4: Commonly Used Domain Name Extensions

TLD	*Description*
.biz	Reserved for businesses only
.com	This is the most common Top Level Domain and it is reserved for commercial enterprises.
.edu	Reserved for educational institutions and universities
.gov	Reserved for United States government agencies
.mil	Reserved for the United States military
.net	This is most often used by Internet Service Providers (ISPs), but it is reserved for any network group.
.org	Reserved for non-profit organizations
.uk or .jp	Web sites located outside of the U.S. will include a country code, such as .uk for the United Kingdom and .jp for Japan
.info	Used in all types of domains

Quick Reference

Understanding Web Addresses:

- Protocol: The protocol tells the server which type of resource you are trying to locate.
- Domain Name: The domain name indicates the company or individual that maintains the site.
- Resource: The resource can be almost any item, including files, programs, and data.
- Extension: An extension indicates what type of program or code is running the Web site. .htm and .html are the most commonly used extensions.

Lesson 3-4: Understanding Secure Web Sites and Information Quality

Figure 3-4

Gain access to secure Web sites by entering a user name and password.

Figure 3-5

An example of a secure Web site sign-in box.

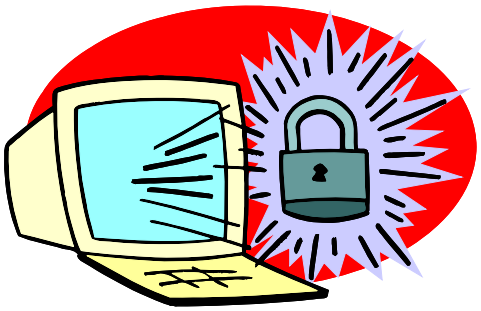


Figure 3-4

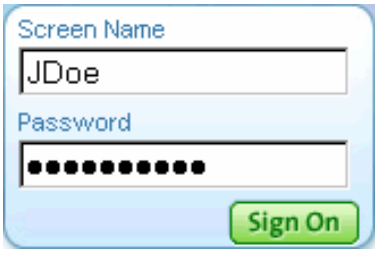


Figure 3-5

IC3

Objective: 3.3.1.5, 3.3.3.5, and 3.3.3.6

Req. File: None

A secure Web site is basically any site that contains information that is not for general public use. Either the information is confidential, or the user is simply a member of the site's organization or a customer of the site's company. For example, you may want to shop at a department store online. When you start your online shopping trip, you will most likely be asked to enter a user name and a password – and maybe some additional personal information. This is so that the next time you visit the Web site, you will have an ID and will be able to access the product in no time. Also, no one else will be able to shop under your user name or password, which provides you with an added sense of online security.

In order to gain access to the information provided on a protected Web site, one is required to enter both a user name and a password. You may be familiar with these terms, because most people employ a user name and password when they log onto their computers, or attempt to gain access to a private network. Read on for a more detailed description of each term.

User Name

A user name is an assigned name, or a name that you choose for yourself, that you must enter in order to gain access to a secure Web site, network, or computer. Usually, a user name is an abbreviation of the user's full name. For example, if your name is John Doe, the abbreviation might be something like "JDoe." A user name may also be an alias, or nickname.

A user name isn't enough to gain access to a secure Web site. You must use the name in conjunction with a password.

Password

A password is a group of characters (letters, numbers, and/or symbols). Passwords are usually 4-16 characters long, depending on the Web site that you are trying to gain access to. They are used to determine whether or not the user that is requesting admittance to the secure Web site is actually the person they claim to be. Passwords generally do not have spaces. When you enter your password into the text box, it is usually replaced with bullets or another symbol so that no one else could read it off of your screen.

Take a look below for some tips on creating "unbreakable" passwords:

- **Do not** pick a password that could easily be guessed by someone who knows you well. Many people like to use the names of their pets, social security number, or birth date. This is not a good idea.

© 2005 CustomGuide, Inc.

- **Do not** use a word that directly relates to current affairs. Chances are, if it's on your mind, it will be on someone else's too.
- **Do** use a mixture of letters and numbers. This makes the amount of combinations almost endless!
- **Do** use a word that you'll remember. You don't want to keep yourself from accessing the secured information!
- **Do** change your password often, and when you do, don't make your new password similar to the old one. Chances are, over time you will have told at least one person what your password is. Constantly changing things around ensures that your password remains secure.

That's about all there is to know about user names, passwords, and using secure Web sites, but there is one more thing we need to cover before we move on to the next lesson.

Unfortunately, the ease of publishing information on the Internet translates to a medium with no oversight or "quality control," leaving it up to the user to determine the value of online resources.

Criteria for evaluating the quality of information found on the Internet include:

- **Relevance:** Does the information relate to specified needs?)
- **Reliability:** Does the information come from a source that can be trusted to provide true and accurate content?
- **Validity:** Can information be verified from more than one source?
- **Potential bias:** Could there be a potential commercial or political bias on behalf of the site's owner?
- **Sufficiency:** Is the information sufficient enough for a specific purpose?

Ways to determine the quality of information on a Web site include:

- Analyzing the source of a site
- Communicating with the creator of a site
- Analyzing internal links within a site
- Evaluating search engine ranking results
- Comparing information found on the Internet with other "offline" sources, such as professional journals found at the library, to clarify ambiguous or incomplete information

Quick Reference

Understanding Secure Web Sites:

- Secure Web Site: A secure Web site contains information not available to everyone.
- User Name: A name, either assigned or chosen by the user, that a person must enter along with a password in order to gain access to a secure Web site.
- Password: A group of characters (usually 4-16 depending on the site) used to determine whether or not the user trying to gain access to a secure Web site is who they claim to be.

Criteria for Evaluating the Quality of Information:

- Relevance
- Reliability
- Validity
- Potential bias
- Sufficiency

Lesson 3-5: Opening and Closing a Web Browser

Figure 3-6

Microsoft's Internet Connection Wizard will set you up with an Internet Service Provider.

Figure 3-7

The Internet Start Web page.

IC3

Objective: 3.3.2.2

Req. File: None

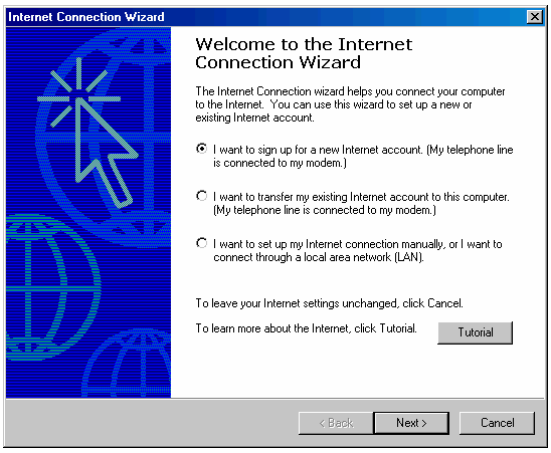


Figure 3-6

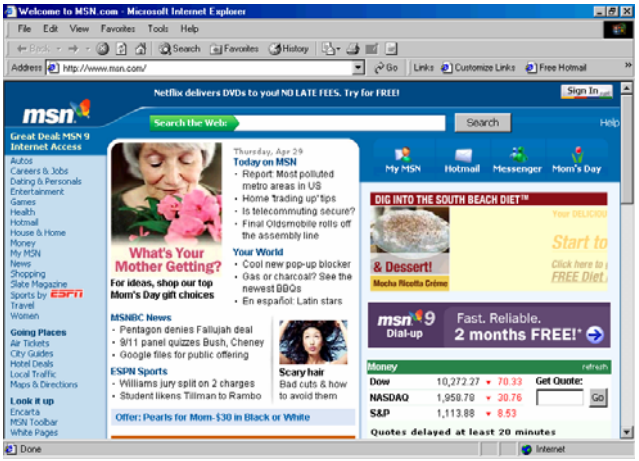


Figure 3-7

There are three things you'll need to connect to the Internet:

- **An Internet Service Provider (ISP):** An Internet Service Provider is a lot like a phone company, except instead of letting you make telephone calls to other people, an Internet Service Provider lets your computer connect to the Internet. Just like your telephone company, Internet Service Providers charge for their services—currently the average rate seems to be about $20 a month for unlimited usage. You've probably already heard of the most famous Internet Service Provider—America Online, or AOL.
- **A Web Browser:** A Web browser is a program that lets your computer view and navigate the World Wide Web. One of the most popular Web browsers is Microsoft's own Internet Explorer. Another Web browsing program that is very popular is Netscape Navigator.

Internet Explorer

Other Ways to Open Internet Explorer:

- Click the icon on the Windows Quick Launch toolbar.

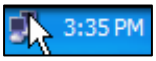
© 2005 CustomGuide, Inc.

- **A Phone Line and Modem or Other Connection:** A modem is your computer's very own telephone that lets it talk to other computers over the telephone line. Your existing phone line will work just fine with your modem, although it will be tied up whenever you're connected to the Internet. If you or someone in your home is a heavy Internet user, you might consider getting a second phone line for your computer. An increasingly popular type of connection is DSL (Digital Subscriber Line) which is much faster than a dial-up connection, and is connected 24-hours a day. This type of connection is similar to what most workplaces have.

1. Click the Windows Start button and then select Internet Explorer to start Microsoft Internet Explorer.

If you have America Online, you would select America Online from the Start menu instead.

If this is the first time you've ever tried connecting to the Internet, you may be greeted by the Internet Connection Wizard, as shown in Figure 3-6. Microsoft included the Internet Connection Wizard to help you get connected to the Internet and find an Internet Service Provider. If you want, you can follow the step-by-step instructions and let the Internet Connection Wizard help find you an Internet Service Provider (ISP)—or, you can find your own. Ask a computer-savvy friend or an employee at a local computer store for the name and number of a local Internet Service Provider. Once you are set up with an ISP, come back finish the rest of this lesson.



Point to this icon and wait a few seconds to see what your connection speed to the Internet is.

2. Enter your user name and password, if necessary, and click Connect.

If you have previously entered your user name and password and checked the Save password option, the user name and password characters will already appear in their respective text boxes. (Your password will appear masked by asterisks or bullets.)

If you listen to your computer, you should hear a dial tone, then your modem dial the phone, and finally a screeching sound as your ISP answers the phone.

NOTE: If you're connected to the Internet through a network at work, an ISDN or DSL line, or a cable modem, you won't hear anything at all, since these are all digital connections. Actually, it would probably pay off if you checked to see if the Internet *is* available in your area by cable or DSL connections. If it is, it's probably worth the extra ten or twenty dollars a month to get a connection to the Internet that is *at least* ten times faster than a standard phone connection. Plus, you don't have to worry about people getting busy signals when you're using the Internet.

After a connection to the Internet has been established, Internet Explorer appears on screen and displays your home page.

Once you're finished with the Internet Explorer program, close it.

3. Click the Close button on the Microsoft Internet Explorer title bar.

The program closes and you are back at the Windows desktop.

It is important to note the difference between a browser's home page and a Web site's home page. A *home page* for a browser is the Web page that your Web browser displays when it first connects to the Internet. The default start page for Microsoft Internet Explorer is MSN (what else did you think it would be?), but you can easily change your home page—more about that in another lesson. Move on to the next lesson to learn more about the home page for a Web site.

Quick Reference

To Connect to the Internet:

1. Double-click the Internet Explorer icon on the desktop.

   Or…

   Click the Internet Explorer icon on the Quick Launch toolbar.

   Or…

   Click the Windows Start button and select Internet Explorer from the menu.
2. If necessary, enter your user name and password and click Connect.

To Close a Web Browser:

- Click the Internet Explorer window's Close button.

  Or…

  Select File → Close from the menu.

Lesson 3-6: Displaying a Specific Web Page

Figure 3-8

The Microsoft Web site open in Internet Explorer.

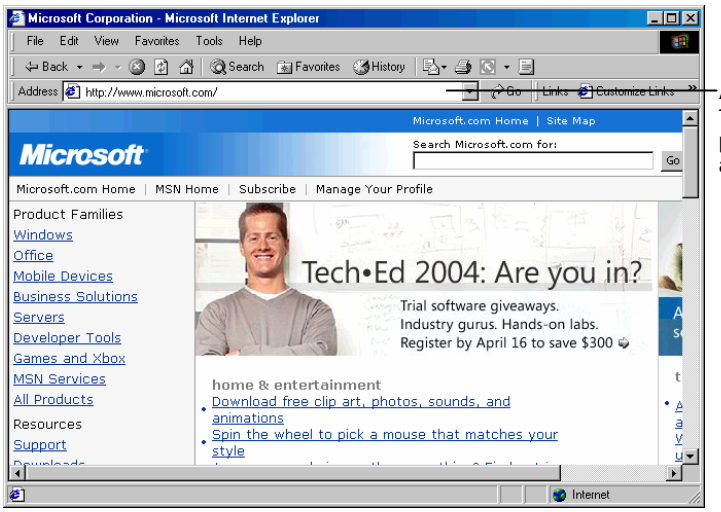
Figure 3-9

When a Web page is currently unavailable, this screen is displayed in Internet Explorer.

IC3

Objective: 3.3.1.1, 3.3.2.1, 3.3.2.2, 3.3.2.3, and 3.3.2.12

Req. File: None



Address bar
Type the address of the Web page you want to view here and press <Enter>.

Figure 3-8

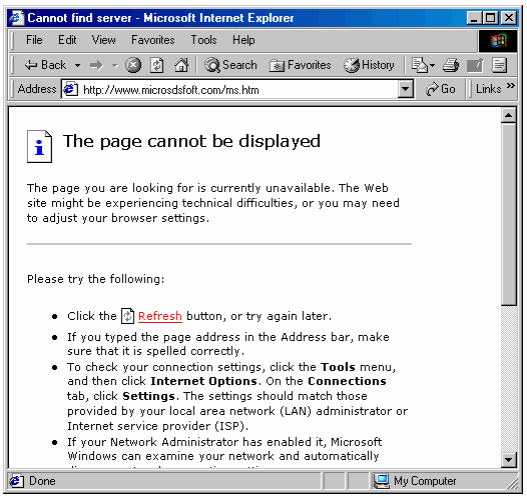


Figure 3-9

Other Ways to Enter an Internet Address:

- Press <Ctrl> → <L>.

Web addresses are everywhere—on television advertisements, in magazine and newspaper articles, and even on business cards. Just like there is a house, office, or building behind a postal address, there is a Web page behind every Web address, and every Web address is unique to that Web page. Unlike postal addresses, through the magic of technology, you can arrive instantly at a Web page by typing its Web address into your Web browser. Well, hopefully instantly… if you've already been on the Internet for any amount of time, you probably know that sometimes the Internet gets busy and *net congestion* can cause a Web page to come up slowly—if at all!

This lesson will show you how to visit the Web sites behind all the Web addresses you've seen.

© 2005 CustomGuide, Inc.

1. Connect to the Internet.

It doesn't matter where you are on the Internet—you can always enter a Web address.

2. Click the words in the Address bar.

The text in the Address bar becomes highlighted.

3. Type the address of the Web page you want to view. In our example, we'll use `www.microsoft.com` and press <Enter>.

Web addresses are preceded by http://. For example, the address we want is http://www.microsoft.com. Technically, you don't need to add the http:// before typing the Web address—save yourself some time and leave it out.

NOTE: If you forget the www in front of a Web address or a .com a feature of Internet Explorer, called *IntelliSense®*, attempts to correct the Web address by adding the www or .com for you. Sometimes it works, sometimes it doesn't.

After a moment, you're connected to the Microsoft Web site, as shown in Figure 3-8. Let's try going to another Web site.

4. Type `www.customguide.com` in the Address bar and press <Enter>.

The CustomGuide, Inc. home page appears. The home page is the main page of a specific Web site.

Just like a metro highway system at rush hour, the Internet often becomes congested when too many users try to view the same Web site at the same time. When this happens, it may take a long time for the Web page to appear on screen, or you may get an error message.

If this happens, try *refreshing* the sluggish or difficult Web page.

5. Click the Refresh button on the toolbar.

Nothing happens here, because the CustomGuide, Inc. home page was working properly to begin with. There are two basic reasons to refresh a Web page:

- To attempt to view a Web page that is not loading.
- To update a Web page that contains information that is constantly changing, such as headline news stories or financial information.

Sometimes when you're browsing the World Wide Web, you'll see a screen like one in Figure 3-9. This means the Web site is unavailable. Several things can cause a Web page not to load:

- The computer where the Web page is stored is down.
- Too many users are trying to view the same Web page at the same time.
- You've lost your connection to the Internet.
- The Web page no longer exists, or maybe it never existed in the first place (did you type in the correct Web address?).

For all these cases, try going to the Web site again later. Whatever was causing the problem might be fixed a few minutes or hours later.

Address Bar

You can leave off the http:// when you type a Web page address. For example, type www.nbc.com instead of http://www.nbc.com.

Refresh button

Quick Reference

To Display a Specific Web Page:

- Type the Web address in the Address bar and press <Enter>.

  Or…
- Press <Ctrl> + <L>, type the Web address, and press <Enter>.

To Refresh a Web Page:

- Click the Refresh button on the toolbar.

Lesson 3-7: Navigating a Web Site and Using Hyperlinks

Figure 3-10

The Internet Explorer toolbar.

Figure 3-11

The CustomGuide, Inc. home page.

IC3

Objective: 3.3.2.2 and 3.3.2.5

Req. File: None

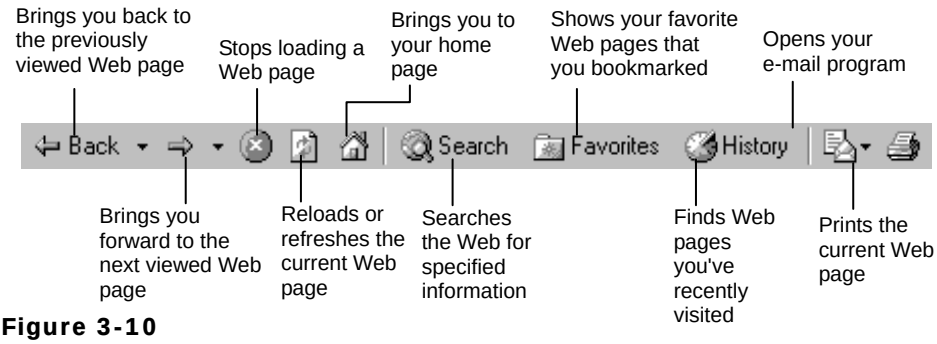


Figure 3-10

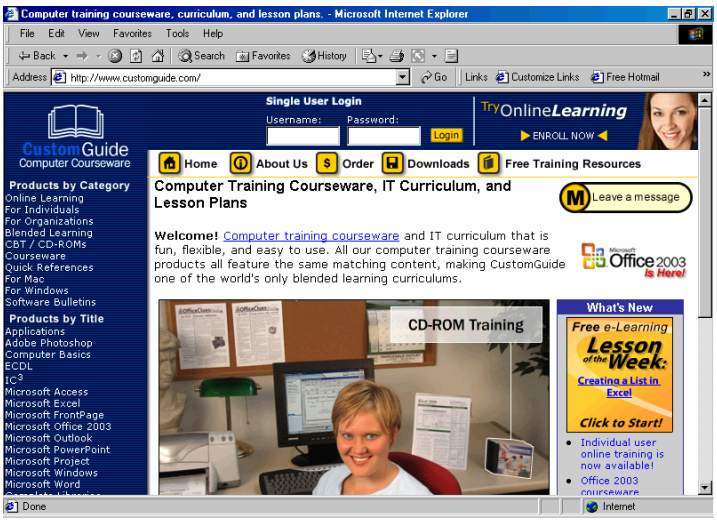


Figure 3-11

Luckily, the World Wide Web is remarkably easy to navigate. It's so easy, in fact, that most users seem to have the uncanny ability to browse through Web pages without any previous training—even if they have difficulty with other computer programs. This chapter explains how to find your way through the millions of Web pages that are on the Internet. Even if you already think you have browsing down, you should read this chapter—you might learn a trick or two you didn't already know.

In addition to covering the navigation techniques involved in browsing the Web, you will also learn how to use a hyperlink. Let's get started!

1. If necessary, go to the CustomGuide, Inc. home page by clicking the Address bar, typing `www.customguide.com`, and pressing <Enter>.

The CustomGuide home page fills the screen. Many of the underlined words and pictures you see on the page are actually *hyperlinks*. When you position the pointer over a hyperlink, it changes to a ☝. Clicking a hyperlink will automatically:

- Take you to a different page within the same Web site.

© 2005 CustomGuide, Inc.

- Take you to a different page in a different Web site.
- Take you to a different part of the same Web site.
- Allow you to download a file.
- Send an e-mail to a specified e-mail address.
- Play a video or sound.

2. Position the pointer over the About Us hyperlink at the top of the CustomGuide, Inc. home page.

The pointer changes into a ☝ any time it is positioned over a link. Remember, links can be either text or images (as in this example), but most often they appear as blue underlined text.

3. Click the About Us hyperlink text or icon.

The About Us Web page appears. Notice the address bar displays the address of the new Web page, http://www.customguide.com/computer_training.htm.

You can easily move back to the previous Web page.

4. Click the Back button on the toolbar.

You're back at the CustomGuide, Inc. home page. The Forward button moves forward through the Web pages you have viewed.

5. Click the Forward button on the toolbar.

You return to the About Us Web page.

Sometimes it may take a bit of "drilling down" in a Web site to find the exact information that you need. Be patient—it's most likely there somewhere!

That's all there is to navigating Web sites! Move on to the next lesson to learn how to display and delete a history of recently visited Web sites.

Tip: Instead of repeatedly clicking the Back and Forward buttons, you can click their down arrows to display a list of previous Web pages.

Back button

Forward button

Quick Reference

To Use a Hyperlink:

- Click the hyperlink with the ☝ pointer.

To Go Back to the Previous Page:

- Click the Back button on the toolbar.

To Go Forward to an Already Viewed Page:

- Click the Forward button on the toolbar.

Lesson 3-8: Displaying and Deleting a History of Visited Web Pages

Figure 3-12

Internet Explorer displays a history of previously visited Web sites.

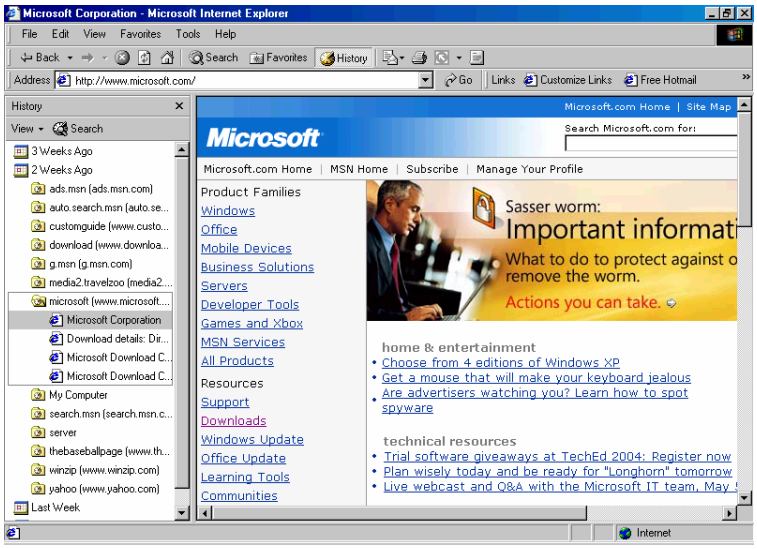


Figure 3-12

IC3

Objective: 3.3.2.4

Req. File: None

Can't find your way back to that that really neat "101 Lutefisk Recipes" Web site you were looking at yesterday? Don't worry—Internet Explorer keeps track of the Web pages you've visited during the past 20 days. You can use Internet Explorer's *history* feature to easily return to any of these sites, and that's the topic of this lesson.

History button

1. **Make sure your Web browser is open and you're connected to the Internet.**

2. **Click the History button on the toolbar to display a list of the Web pages you have recently visited.**

   A history of all the Web pages you've visited recently appears in the left-hand side of the Internet Explorer window. The history is grouped chronologically—all you have to do it click the day or week you last viewed the Web page that you want to view again.

3. **Click the day or week you last viewed the Web page that you want to view again.**

   If you can't remember the day or week off hand, don't worry. Finding the Web page that you want to view in the History folder may take a bit of trial and error, because who really remembers the exact day when they visited a specific Web page?

   When you click a day or week, the Web sites you viewed during that day or week appear. A Web site symbol appears to the left of each Web site.

4. **Click the Web site you want to view again.**

   The Web site's individual Web pages appear with a Web page symbol beside them.

5. **Click the Web page you want to view.**

   The Web page appears.

© 2005 CustomGuide, Inc.

If your History folder is getting full, you should go ahead and delete the contents. You can clear your History folder using the Internet Options dialog box.

6. Select Tools → Internet Options from the menu. If necessary, click the General tab.

The Internet Options dialog box appears with the General tab in front. Here, you can clear your History folder and change the number of days that you would like pages kept in the folder. The default number of days is 20.

Go ahead and delete the contents of the History folder.

7. In the History folder, click the Delete History button.

A dialog box appears, asking if you are sure that you want to delete the contents of your History folder.

You may want to go back to the Yahoo home page, so you'd better not delete it just yet.

8. Click No and then click the Cancel button to close the Internet Options dialog box.

The Internet Options dialog box closes and you return to the Internet Explorer program window with the History folder still open.

When you are finished working with the History folder, go ahead and close it.

9. Click the History button on the toolbar.

The History folder disappears.

Move on to the next lesson to learn how to add a Web page to the Favorites list!

Quick Reference

To Display a History of Visited Web Pages:

1. Click the History button on the toolbar.
2. Click the day or week you last viewed the Web page.
3. Click the Web site you want to view again.
4. Click the specific Web page you want to view.
5. Click the History button on the toolbar when you've finished working with your history of recently view Web pages.

To Delete a History of Visited Web Pages:

1. Select Tools → Internet Options from the menu.
2. If necessary, click the General tab.
3. In the History folder, click the Delete History button.
4. Click Yes. Then click OK to close the Internet Options dialog box.

Lesson 3-9: Adding a Web Page to Favorites

Figure 3-13

The Add Favorite dialog box.

Figure 3-14

Click the Favorites button to display a list of your favorite Web pages.

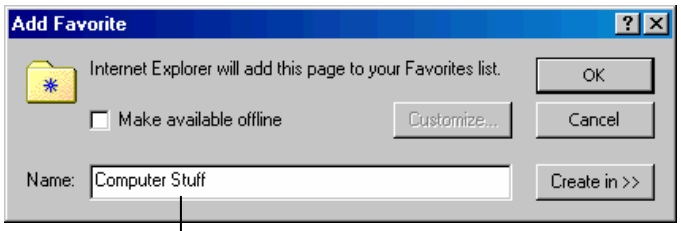


Figure 3-13

The name of the Web page automatically appears here, but you can change it to something more meaningful.

Click the Web page you want to visit. If the Web page is in a folder, click the folder ( ).

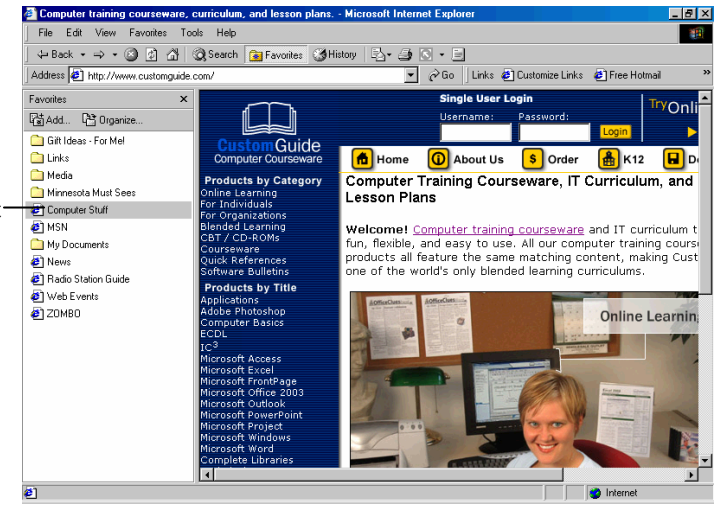


Figure 3-14

IC3

Objective: 3.3.2.6

Req. File: None

You have finally found a Web page about hippopotamus food, and you want to return back to it later. What should you do? Well, you don't have to write down the Web address on a Post-It note and stick on your monitor—you can add the Web page to Internet Explorer's Favorites so you can always quickly return back to any Web page in the list! In this lesson, you'll learn how to bookmark your favorite Web sites using Internet Explorer.

Other Ways to Add a Web Page to Favorites:

- Right-click anywhere on the Web page and select Add to Favorites from the shortcut menu.

1. Make sure you're connected to the Internet and that your browser is open.

2. Navigate to a Web page that you visit frequently.

It doesn't matter how you get to the Web site—type the page's Web address in the Address bar (if you know it) or navigate there by clicking a hyperlink from another Web site. When the desired Web page appears on your screen, you can add it to your Favorites so you can always easily return to it later.

© 2005 CustomGuide, Inc.

3. Select Favorites → Add to Favorites from the menu.

The Add Favorites dialog box appears, as shown in Figure 3-13. The name of the Web page appears in the name box—if you want, you can replace the Web page's default name with one that is more meaningful to you. If you want to add a shortcut to the folder, click the Create In button.

When you are finished, go ahead and add the Web page to Favorites.

4. Click OK to add the Web page.

A shortcut to the Web page is added to your list of favorites.

Here's how to display your favorite Web sites:

5. Click the Favorites button on the toolbar.

A list of your favorite Web pages appears in a panel on the left side of Internet Explorer, as shown in Figure 3-14.

6. Click the favorite Web page you want to view.

If your favorite Web page is in a folder, just click the folder and then the favorite Web site. The Web page you clicked appears in the right-hand panel of the Internet Explorer program window.

Move on to the next lesson to learn how to create folders so you can organize your favorite Web sites.

Favorites button

Other Ways to View Your Favorite Web Pages:

- Select Favorites from the menu and then select the Web page.

Quick Reference

To Add a Web Page to Favorites:

- Go to the Web page, select Favorites → Add to Favorites from the menu, and click OK.

  Or…

- Go to the Web page, right-click anywhere on the Web page and select Add to Favorites from the shortcut menu.

To Go to a Favorite Web Page:

- Click the Favorites button on the toolbar and select the Web page from the left-hand side of the Internet Explorer program window. Click the Favorites button when you're finished.

Or…

- Select Favorites from the menu and then select the Web page.

Lesson 3-10: Creating Favorite Folders and Deleting Favorites

Figure 3-15

The Organize Favorites dialog box.

Figure 3-16

Favorites with new folders added.

IC3

Objective: 3.3.2.6

Req. File: None

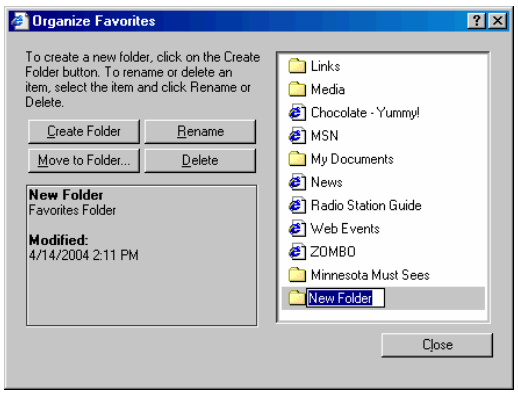


Figure 3-15

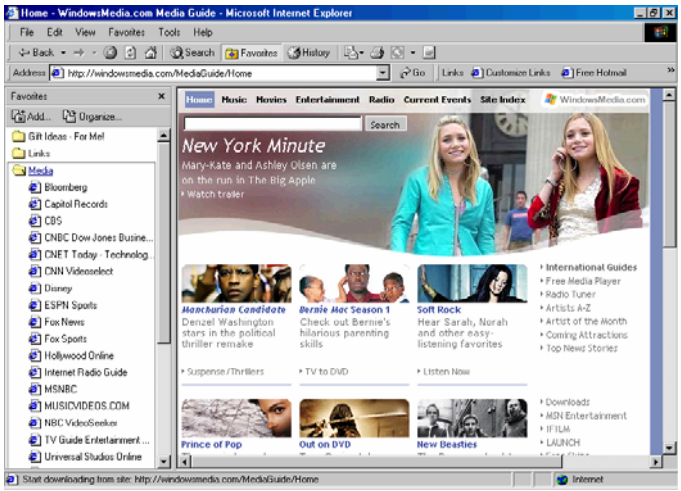


Figure 3-16

If you've added a lot of Web pages to your list of favorites, it can be difficult to find a specific Web page out of all those entries. You can organize your favorites list by creating subfolders to keep related Web pages together—for example, you might create a folder called "Travel" to keep all your travel related Web pages together, and another folder called "Financial" to hold your financial and investment related Web pages. Here's how to organize your list of favorites:

1. Select Favorites → Organize Favorites from the menu.

The Organize Favorites dialog box appears, as shown in Figure 3-15. Your unorganized list of favorite Web sites appears on the right-hand side of the dialog box. Let's create a new folder.

© 2005 CustomGuide, Inc.

2. Click the Create Folder button.

A new folder appears in the Favorites list with the default "New Folder" name highlighted, as shown in Figure 3-15. All you have to do is give the folder a name.

3. Type a name for the folder and press <Enter>.

The folder is renamed. To add Web pages to the folder, simply drag and drop them into the new folder.

4. Drag one of your favorite Web pages until it is positioned over the new folder. Then, release the mouse button.

The Web page disappears. Don't worry, it's not gone. The Web page has been inserted into the new folder. To view the contents of the new folder, simply click it.

5. Click the folder you just added to the Favorites list.

The contents of the folder appear indented and below the folder.

There may come a time that one of your favorite Web pages just isn't your favorite anymore. When this happens, it's time to clean out your Favorites list.

To delete a Web page from your Favorites list…

6. Click the Web page that you want to delete from your Favorites list to select it.

When you select a Web page, it becomes highlighted. Now delete it.

7. Click the Delete button.

A dialog box appears asking if you are sure that you want to remove the Web page from your Favorites list.

8. Click Yes.

The Web page is now erased from the list.

9. Close the Organize Favorites dialog box.

Ever wish you could view a Web page without being connected to the Internet? Move on to the next lesson to learn how.

Other Ways to Add Web Pages to a Folder:

- Select the Web page, click the Move to Folder button, select the desired folder from the list, and click OK.

Other Ways to Delete Web Pages from your Favorites List:

- Select the Web page and press the <Delete>

Quick Reference

To Create a New Favorite Folder:

1. Select Favorites → Organize Favorites from the menu.
2. Click the Create Folder button.
3. Rename the folder.

To Add Web Pages to a Favorite Folder:

- Drag the Web page so that it is positioned over the desired folder. Then, release the mouse button.

  Or…

- Select the Web page, click the Move to Folder button, select the desired folder from the list, and click OK.

To Delete a Web Page from your Favorites List:

- Select the Web page that you want to delete from your Favorites list and click the Delete button.

Or…

- Select the Web page and press the <Delete> key.

Lesson 3-11: Saving a Web Page

Figure 3-17

The Save Web Page dialog box.

IC3

Objective: 3.3.2.7

Req. File: None

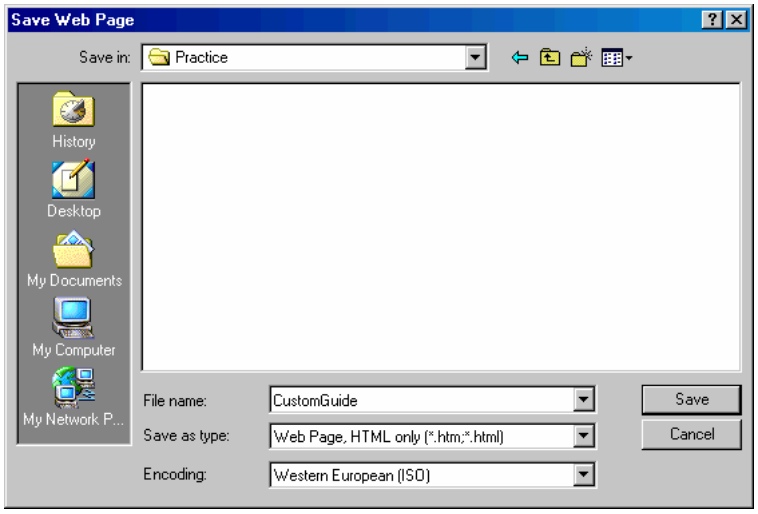


Figure 3-17

If you have found an incredibly useful Web page, but it contains more information than you have time to look at in one sitting, you may want to save the Web page to a location on your computer's hard disk. This way, you can access the page's content without having to be connected to the Internet. In this lesson, you'll learn how to save a Web page.

Let's try saving the CustomGuide, Inc. Web site.

1. **If necessary, open your Web browser and navigate to the CustomGuide, Inc. Web site by typing `www.customguide.com` into the Address bar.**
2. **Select File → Save As from the menu.**

   The Save Web Page dialog box appears, as shown in Figure 3-17. This is where you give the Web page a name so that you can return to it later.
3. **Type `CustomGuide` in the File name text box.**

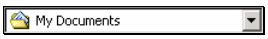
   You also have to specify where you would like to save the Web page.
4. **Click the Look in list arrow and navigate to the folder in which you want to save the Web page.**

   Your computer stores information in files and folders, just like you store information in a filing cabinet.

   The Save dialog box has its own toolbar that makes it easy to browse through your computer's drives and folders. Two controls on this toolbar are particularly helpful:

   - **Look In List:** Click to list the drives on your computer and the current folder, then select the drive and/or folder whose contents you want to display.
   - **Up One Level button:** Click to move up one folder level. This is especially helpful when sifting through folders within folders

   Follow your instructor's directions to select the appropriate drive and folder to save this Web page.



Look in List

Up One Level button

© 2005 CustomGuide, Inc.

Saving a Web page is a little different than saving a document or spreadsheet. You need to specify a file type.

5. Click the Save as type list arrow.

You have several options here:

- **Web Page, complete:** This option will save every file that is needed to display the current Web page. This includes style sheets, frames, graphics, animations, etc. Each individual file is saved in its original format. This can be a very large file.
- **Web Page, HTML only:** This option will save just the information contained in the Web page. It will not save graphics, animations, sounds, videos, etc. All of the text will maintain its original formatting and placement.
- **Text Only:** This option will save just the information contained in the Web page, much like the HTML only option. However, the Text Only option, will save the file in straight text format.

6. Choose the Web Page, HTML only option.

If you actually wanted to save this Web page, you would go ahead and click the Save button. You don't want to save the page, so…

7. Click the Cancel button in the Save Web Page dialog box.

The Save Web Page dialog box closes and you return to the Internet Explorer program window.

Quick Reference

To Save a Web Page:

1. Select File → Save As from the menu.
2. Type a name for the Web page in the File name text box.
3. Click the Save as type list arrow and select the desired file type.
4. Click the Save button.

Lesson 3-12: Copying and Pasting Images, URLs, and Text

Figure 3-18

The copied items pasted into a word-processing program.

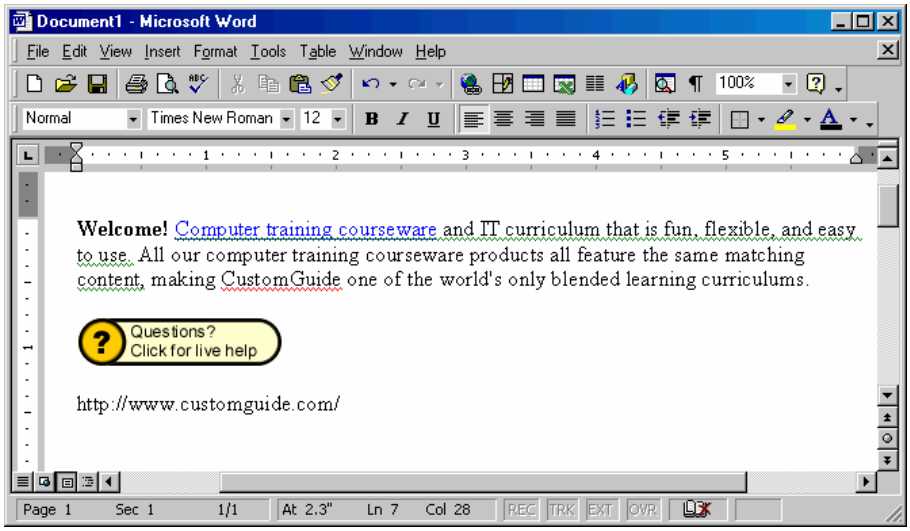


Figure 3-18

IC3

Objective: 3.3.2.8

Req. File: None

In your various searches of the World Wide Web, you may come across some text, an image, or even a URL that you want to copy into a word-processing program. For example, if you are creating a memo for your company and you would like to include the logo that is posted on your company's Web site, you could open the site, copy the image, and paste it into the document.

Other Ways to Copy Text and Web Addresses:

- Press <Ctrl> + <C>.
- Click the right-mouse button and select Copy from the shortcut menu.

It is important to note that Internet users are not granted permission to copy just anything off of the Web. Some Web pages are copyrighted, which means that you would be breaking the law if you copied anything from the page and then used it yourself. Some Web sites allow you to copy items, while others do not. Be careful when you choose to use items from someone else's Web site. In most cases, it is best to ask the Web master, or site creator, for permission before you copy anything from a Web page.

In this lesson, you'll learn how to copy an image, some text, and a URL and then paste them into a word-processing program.

1. **Make you are connected to the Internet and that your Web browser is open.**

   First, you need to navigate to a Web page that you would like to copy items from. In this lesson, we're going to use the CustomGuide, Inc. Web site.

2. **Navigate to the CustomGuide, Inc. Web site by typing `www.customguide.com` into the Address bar.**

   The CustomGuide home page appears in the browser's window. Next, you need a program to copy the items into. You can use any word-processing program, but in this lesson we're going to use Microsoft Word.

© 2005 CustomGuide, Inc.

3. Open Microsoft Word by clicking the Windows Start button and selecting Programs → Microsoft Word from the menu.

Your computer may be set up differently, so if you have trouble finding the program, ask your instructor for assistance.

You need to display your browser window again.

4. Click the Internet Explorer icon on the Windows taskbar to make the browser window active.

First, let's copy some text. You are going to select the text that appears above the picture on the CustomGuide home page.

5. Select the paragraph that begins with Welcome! and ends with blended learning curriculums.

The text will be highlighted when it has been selected. Next, you need to copy the text.

6. Select Edit → Copy from the menu.

Nothing appears to have changed, but the selected text has been copied to the Windows clipboard and is ready to be pasted.

7. Click the Microsoft Word icon in the taskbar to make the program active.

Now, all you have to do is paste the copied text into the document.

8. Click the Paste button on the Standard toolbar.

The copied text is inserted. Copying images is just as easy.

9. Click the Internet Explorer icon to make the browser active.

In order to copy the image itself, and not the link, you need to use the shortcut menu.

10. Right-click the Questions? Click for live help. icon located in the upper right-hand corner of the CustomGuide, Inc. Web page and select Copy from the shortcut menu.

The selected image has been copied to the Windows clipboard.

11. Click the Microsoft Word icon in the taskbar to make the program active and press <Ctrl> + <V>.

The image is pasted into the document. The last thing you'll learn to copy is a Web address, or URL.

12. Click the Internet Explorer icon to make the program active. Then select the entire Web address that is displayed in the address bar.

This time, you're going to use a keyboard shortcut to copy.

13. Press <Ctrl> + <C>.

The URL has been copied to the Windows clipboard.

14. Click the Microsoft Word icon in the taskbar to make the program active and select Edit → Paste from the menu.

The URL is pasted into the document. Compare your document to the one pictured in Figure 3-18.

That's all there is to copying text, images, and Web addresses from Web pages. You do not want to save the items that you copied from the CustomGuide, Inc. Web site, so…

15. Close the Microsoft Word program without saving your changes.

Paste button

Other Ways to Paste:

- Select Edit → Paste from the menu.
- Press <Ctrl> + <V>.
- Click the right-mouse button and select Paste from the shortcut menu.

Quick Reference

To Copy Text or Web Addresses from a Web Page:

1. Select the text or URL you want to copy.
2. Select Edit → Copy from the menu.

   Or…

   Press <Ctrl> + <C>.

   Or…

   Right-click the selected text or URL and select Copy from the shortcut menu.

To Copy an Image from a Web Page:

1. Right-click the image you want to copy.
2. Select Copy from the shortcut menu.

To Paste Text, an Image, or a URL into a Document:

- Click the Paste button on the Standard toolbar.

Or…

- Select Edit → Paste from the menu.

Or…

- Press <Ctrl> + <V>.

Or…

- Right-click the document and select Paste from the shortcut menu.

Lesson 3-13: Previewing and Printing a Web Page

Figure 3-19

The Print Preview screen.

Figure 3-20

The Print dialog box.

IC3

Objective: 3.3.2.9

Req. File: None

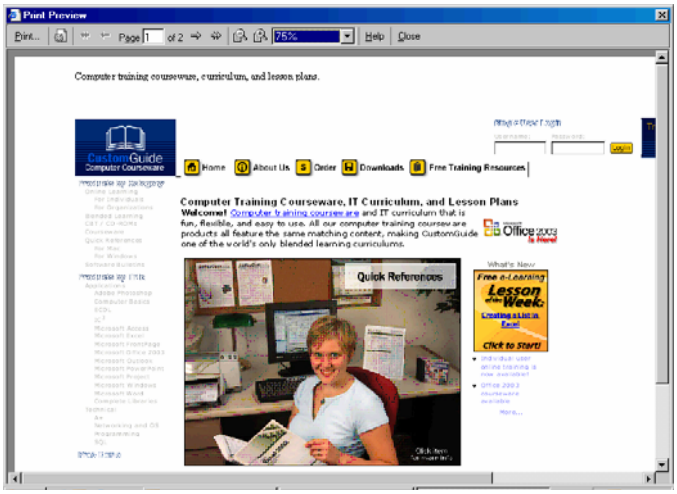


Figure 3-19

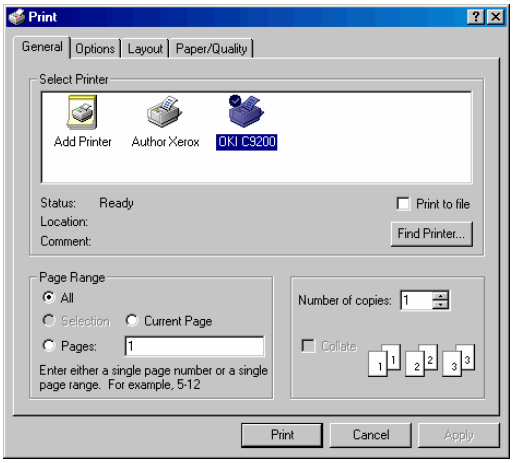


Figure 3-20

You can create a printed copy of just about any Web page (if your computer is connected to a printer). Before you print a Web page, it's a good idea to preview it on a screen to make sure that all of the properties you changed look okay. This way, you will not have to print the page numerous times (wasting paper).

The last thing that you need to do before you send the Web page off to the printer is change some of the output options. In this lesson, you'll learn how to print an entire Web page, print specific pages, print a specific frame, print selected text, change the number of copies, and most importantly, how to print!

To preview the Web page, you must once again go to the File menu.

© 2005 CustomGuide, Inc.

1. Select File → Print Preview from the menu.

A print preview of the Web page appears on the screen, as shown in Figure 3-19. Unless you have eyes like a hawk (or a very large monitor) you probably won't notice the small changes you made to the Web page's margins, but you can certainly tell that the page is using landscape orientation.

2. Click the Close button on the Print Preview toolbar.

You return to the Web page. Now that everything has been previewed and you have changed the Web page's properties, you are ready to print.

3. Click the Print button on the Internet Explorer toolbar.

The Web page is sent to the default printer connected to your computer using default settings (entire Web page, print on one side).

NOTE: If you are covering this lesson in a classroom setting, your computer may not be set up for printing ability

If you don't want to use the default settings, use the Print dialog box to specify print options such as which pages you want to print, or number of copies.

4. Select File → Print from the menu.

The Print dialog box appears, as shown in Figure 3-20. Using the print keystroke <Ctrl> + <P> will open the Print dialog box as well.

Let's explore some of the options in the Print dialog box.

5. Let's look at the Page Range section of the dialog box.

This area contains options that will allow you to specify exactly what you want to print from the Web page. There are four options in this area:

- **All:** Prints all the pages in the Web page.
- **Current Page:** Prints only currently active page.
- **Selection:** Prints only selected text or frame; this option is not available if you haven't selected anything within the Web page.
- **Pages:** Prints only the pages of the Web page that you specify in the Pages text box.

Once you've specified what you want to print, you can specify how many copies you want to print.

6. Look at the Copies section of the dialog box.

Specify how many copies of the Web page you want to print here. Check the Collate checkbox to print the copies in binding order.

If you are hooked up to a network that has multiple printers, you can also choose which printer you want to print from. The default printer is the one that appears in the dialog box, but you can print from a different printer if you have multiple printers installed on your computer.

7. In the Printer section at the top of the dialog box, click the Name list arrow.

If you have multiple printers installed on your computer, you will have multiple options in the list.

Once you have chosen your print options, you can click OK to print the Web page, or if you choose not to print, click the Cancel button.

8. Click the Cancel button.

The Print dialog box closes, and you return to the Web page.

Other Ways to Print:

- Press <Ctrl> + <P >.
- Click the Print button on the toolbar.

Quick Reference

To Preview a Web Page on Screen:

- Select File → Print Preview from the menu.

To Change Print Output Options:

1. Select File → Print from the menu.

   Or…

   Press <Ctrl> + <P>.
2. Change the options in the Print dialog box.

To Print a Web Page:

- Click the Print button on the Internet Explorer toolbar.

Or…

- Select File → Print from the menu.

Or…

- Press <Ctrl> + <P>.

Lesson 3-14: Downloading Images and Files

Figure 3-21

Specify where on your hard drive you want the downloaded file to be saved.

Figure 3-22

Windows displays the progress of a download.

IC3

Objective: 3.3.2.10

Req. File: None

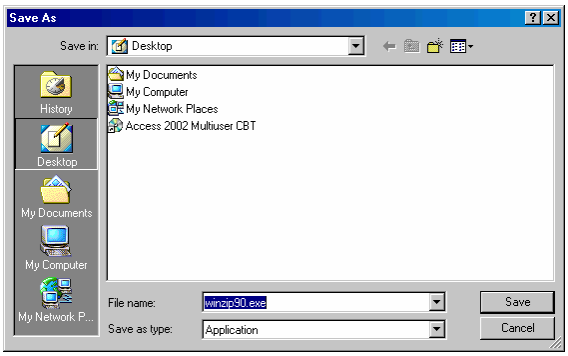


Figure 3-21

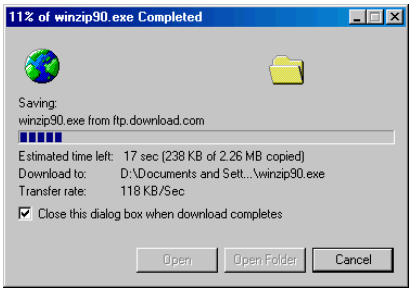


Figure 3-22

Another common way people use the Internet is to download files from a Web server on the Internet and save them onto their local hard drive. Some of the most common types of files people download from the Internet include:

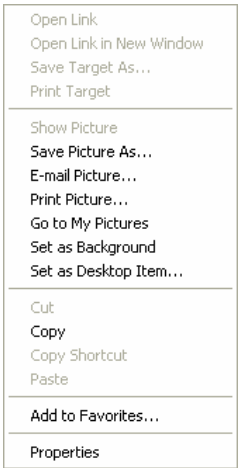
- **Text:** You can save any text that you find on a Web page. Usually, these are word-processor files, like Microsoft Word.
- **Images:** You can save any picture that you see on a Web page, print it, use it as your Windows wallpaper, or anything else you can think of.
- **Programs**: Many software companies have demo versions of their programs available on the Internet that you can download and evaluate. In addition, thousands of shareware programs are available for you to download for free!
- **Patches, Fixes, and Drivers:** One of the great things about the Internet is how you can find and download bug fixes for your programs, and drivers for your hardware devices, such as a driver for a discontinued foreign printer.
- **Music:** A new file format called MP3 is revolutionizing the music industry. MP3 files are sound files that you can listen to on your computer. They have digital CD quality sound, but use compression so they are eleven times smaller than the CD equivalent and small enough to be downloadable from the Internet.
- **Videos:** Movies are becoming almost as widely available online as music has become. You can download some of your favorite flicks from the Internet, but beware – video files tend to run on the larger side and can take an extremely long time to download.

© 2005 CustomGuide, Inc.

- **Viruses:** Just kidding – the last thing in the world you want to download from the Internet is a computer virus! Since you won't always know where a program or file you want to download comes from, you should make sure that your computer has a virus protection program installed before you download anything from the Internet.

Other than the slight risk of contracting a virus (if you don't have virus protection software installed), the only other downside of downloading files off the Internet is how long it can take. Also, make sure that you are aware of the laws that govern downloaded files from the Internet. Some files may be copyrighted, and therefore are illegal to download onto your computer. Remember, just because the file is available to download, that does not necessarily make it legal!

In this lesson, you'll learn how to download files and images from the Internet and save them to your hard disk. When you come across a picture or image on the Internet that you really like, here's how you can permanently save it to your computer's hard drive:



Internet Explorer shortcut menu

1. **Right-click the image you want to save and select Save Picture As from the shortcut menu.**

   Windows asks where you want to save the image by presenting you with the Save As dialog box, as shown in Figure 3-21.

2. **Navigate to the drive and folder where you want to save the image, give the image a different name (if you want to), and click OK.**

   Windows saves the image to the specified drive and folder.

   The procedure for downloading and saving programs and other files from the Internet is almost the same as downloading and saving an image. Here's how…

3. **Find the file you want to download, right-click it and select Save Target As from the shortcut menu.**

   Also, you can usually just click a file that you want to download, but doing this will sometimes open the file in Internet Explorer instead of saving it to your computer.

   As with images, you have to specify where you want to save this file.

4. **Navigate to the drive and folder where you want to save the file, give the file a different name (if you want to), and click OK.**

   Windows will download the file and save it to the drive and folder you specified. It may take several minutes, hours, or sometimes even days to download the file, depending on the file's size and how fast your connection to the Internet is. Windows displays a dialog box that shows the progress of the download, as shown in Figure 3-22.

   NOTE: Make sure you remember where you save your downloaded files! Many people download software without thinking about where they're saving it, only to be unable to find the file once it's finished downloading. It makes sense to create and use a folder named "Downloads" or something similar where you can save your downloaded files.

One more note about downloading files and programs off the Internet: a large percent of the programs you can download off the Internet are stored in *ZIP* files. ZIP files package programs and files together to make them much easier to download.

ZIP files do two things:

- **Compress Information:** Instead of downloading a 2 MB file, you can download a 1 MB file in half of the time.
- **Store multiple files together in a single ZIP file:** Instead of downloading 20 or so files that a program needs to run, you only have to download a single ZIP file.

If your version of Windows does not unzip the files for you, there is another program called WinZIP. You can find and download this program for free at www.winzip.com.

Quick Reference

To Save an Image from a Web Page:

1. Right-click the image you want to save and select Save Picture As from the shortcut menu.
2. Navigate to the drive and folder where you want to save the image, give the image a different name (if you want to), and click OK.

To Download a File:

1. Right-click the file you want to download and select Save Target As from the shortcut menu.
2. Navigate to the drive and folder where you want to save the file, give the file a different name (if you want to), and click OK.

Lesson 3-15: Changing Your Home Page

Figure 3-23

You can change your home page in the Options dialog box.

IC3

Objective: 3.3.1.1 and 3.3.2.11

Req. File: None

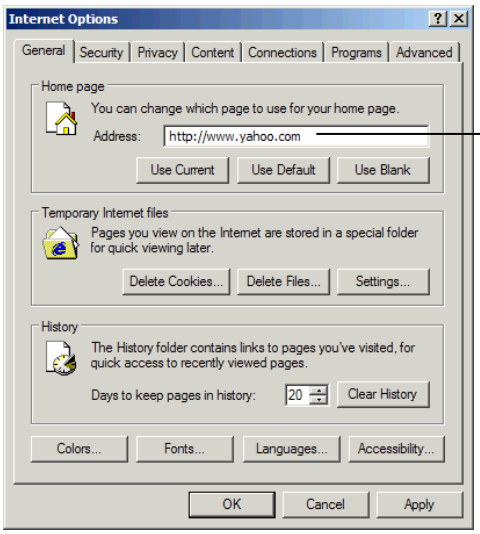


Figure 3-23

Is there a Web page that you *really* like and use almost every time you're on the Internet? You might consider making that Web page your *Home page*—the Web page that appears each time you start Internet Explorer. Some of the Search Engines we discussed in a previous lesson make excellent home pages. Here's how to make a Web page your home page:

Quick Reference

To Change Your Home Page:

- Go to the Web page that you want to set as your home page, select Tools → Internet Options from the menu and click the Use Current button. Or, type the address into the Address text box that appears in the Home Page panel.

1. **Make sure you're connected to the Internet and that your Web browser is open.**
2. **Go to a Web page that you want to set as your home page and select Tools → Internet Options from the menu. Click the General tab, if necessary.**

   The Internet Options dialog box appears, as shown in Figure 3-23. The address of your current home page appears in the Address text box that appears in the Home page panel.
3. **Click the Use Current button to set the Web page that is displayed on your screen as your new home page.**

   Or, you could change your home page manually by clicking the text that appears in the Address text box and typing in the address.
4. **Click OK.**

   The Internet Options dialog box closes. The next time you start Internet Explorer, the Web page you just selected will appear as your start page.

   Go ahead and try it out.
5. **Close Microsoft Internet Explorer by clicking the Close button.**

   The program closes. Now go ahead and start it up again to see your new home page.
6. **Double-click the Internet Explorer icon on the Window's desktop.**

   The Internet Explorer program opens, displaying your new home page.

© 2005 CustomGuide, Inc.

Lesson 3-16: Changing Privacy Settings

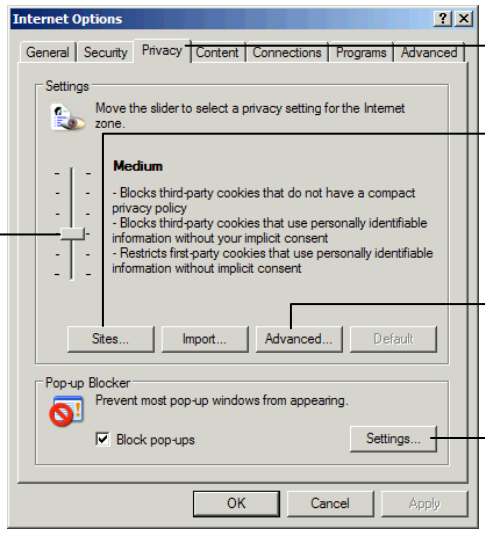


Figure 3-24

Figure 3-24

The Internet Options dialog box with the Privacy tab selected.

IC3

Objective: 3.3.2.11

Req. File: None

In addition to changing a browser's default home page, you can also change a browser's privacy settings such as "cookies," or files that track your activity on the Web.

In this lesson, you'll learn how to manage the privacy settings for your Web browser.

1. **Make sure you're connected to the Internet and that your Web browser is open.**

2. **Select Tools → Internet Options from the menu and click the Privacy tab.**

   The Internet Options dialog box appears with the Privacy tab in front, as shown in Figure 3-24. Let's take a look at some of these settings.

3. **Click the Sites button.**

   The Per Site Privacy Actions dialog box appears. Here, you can manage sites that use cookies. Simply type the address of the Web site you wish to manage in the text box, then click the Allow button or the Block button to allow or block cookies, respectively.

   We don't want to make any changes here, so let's close the dialog box.

4. **Click the dialog box Close button.**

   You are now back at the Internet Options dialog box. Refer to Figure 3-24 for more privacy settings.

   When you are finished navigating the Internet Options dialog box, close it.

5. **Click the Cancel button to close the Internet Options dialog box.**

Quick Reference

To Manage Privacy Settings for a Web Browser:

1. Select Tools → Internet Options from the menu and click the Privacy tab.
2. Specify your options, and when you're finished, click OK.

Lesson 3-17: Selecting a Search Engine

Figure 3-25

You can search the Web with Internet Explorer's integrated search function.

Figure 3-26

You can also search the Web with Yahoo or any other Search Engine of your choice.

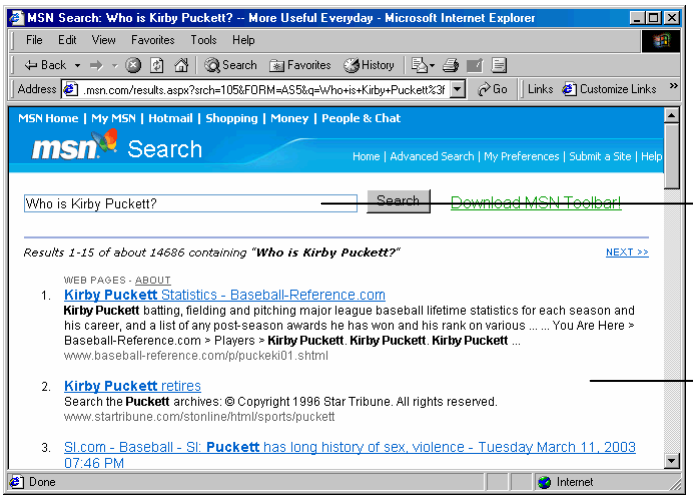


Figure 3-25

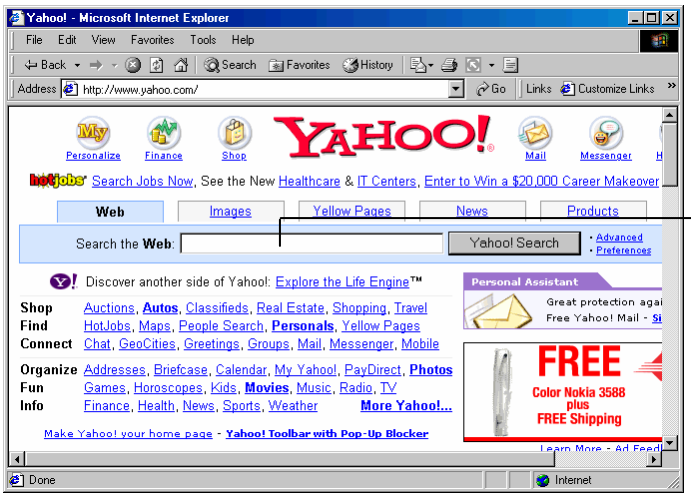


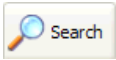
Figure 3-26

IC3

Objective: 3.3.3.1, 3.3.3.2, 3.3.3.3, and 3.3.3.4

Req. File: None

The Internet's greatest strength is also its greatest weakness: with so much information—literally millions of Web pages—it can be extremely difficult to find what you're looking for. Fortunately, there are many Search Engines that catalog the millions of Web pages on the Internet so that you can find Web pages on topics that interest you. There are many Search Engines available on the Internet—you've probably heard of some of the more popular ones, like Google, Yahoo, Excite, and HotBot. In this lesson, you'll learn how you can search the Web to find information on specific topics.



Search button

1. **Make sure you are connected to the Internet and that your Web browser is open.**

© 2005 CustomGuide, Inc.

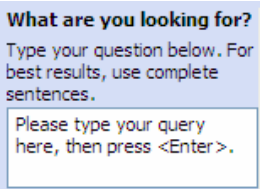
2. Click the Search text box and type in the keyword or phrase you want to search for.

For better search results, use complete sentences or several keywords that describe what you're looking for. For example, typing "Where can I find a good oyster restaurant in Chicago?" would yield better results than simply "oysters".

3. Click the Search button.

The Security Alert dialog box may appear (it appears almost every time you send information over the Internet, unless you check the "In the future do not show the warning" check box). If it does, you can safely click OK.

Microsoft Internet Explorer returns a list of Web pages, ranked by relevance, which contain the word or phrase you specified. You may have to scroll down to view the entire list.



Search Box

4. Click the Web page you want to view.

Are you finding mostly irrelevant information in your search results? Then you may have to refine your search. For example, a search on the word "Windows" may result in links to "Anderson® Windows," "Stained Glass Windows," and "Microsoft Windows", while a search on the phrase "Microsoft Windows" will result in links to "Microsoft Windows." Some Search Engines will let you search within your results. For example, you could do a search for "Microsoft Windows" and then further refine your search by searching results for the word "Networking."

You don't have to use Microsoft Internet Explorer's Search feature to look for information on the Web—you can also go directly to a Web site and use its indexes or lists of links to help you find related information located on other Web sites. Some Web sites even have their very own Search feature, allowing you to search the site itself.

The table below is by no means a definitive inventory of the dozens of Search Engines that are currently available on the Web, but it lists the best and most popular Web Search Engines and their Web addresses.

Table 3-5: Popular Search Engines on the Web

Site	*Web Address*	*Description*
AltaVista	www.altavista.com	Operated by Digital, AltaVista claims to catalog and index more Web pages than any other search engine.
Excite	www.excite.com	Excite has a powerful, highly rated search engine, and it also has one of the best customizable home pages on the Internet.
Google	www.google.com	Google is consistently ranked as the best and most relevant search engine. However, it doesn't contain many other features other than search.
Hotbot	www.hotbot.com	Though not as popular as some of the others, HotBot consistently ranks as one of the best, most relevant search engines.
Lycos	www.lycos.com	Lycos is another powerful search engine, especially if you're looking for information in formats other than Web pages, such as MP3 sound files.
Yahoo	www.yahoo.com	The mother of all Web pages, Yahoo is actually more of a directory service than a search engine, but it makes it very easy to find topics, especially if you're new to the Internet.

Quick Reference

To Search the Web for Information Using Internet Explorer:

1. Click the Search text box and type in the keyword or phrase you are looking for.
2. Click the link for the Web page you want to look at.

To Search the Web for Specific Information using a Search Engine:

- Type the Web address for the Search Engine in the Address bar and press <Enter>. Type the word or phrase you want to search for in the Web page's Search text box and press <Enter>.

Lesson 3-18: Performing an Advanced Search

Figure 3-27

Yahoo's Advanced Web Search page.

IC3

Objective: 3.3.3.1, 3.3.3.3, and 3.3.3.4

Req. File: None

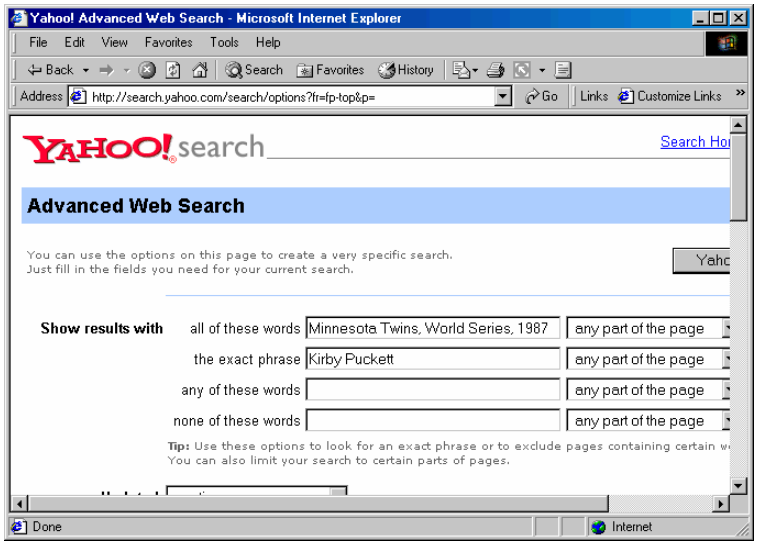


Figure 3-27

Performing a search using a keyword or phrase is definitely effective; in fact sometimes it can be too effective. If you are too vague with your request, or if the subject area is too broad, the Search Engine could produce hundreds of thousands of results. You certainly don't want to have to waste your time searching through a bunch of fluff to find the information that you are really looking for, do you? That's why each Search Engine is equipped with an *Advanced Search* feature. Advanced searches allow you to incorporate multiple different types of selection criteria in one search. Using an advanced search is one of the best ways to narrow down your search results.

In this lesson, you will learn how to perform an advanced search. You will not use all of the selection criteria available, but take a look at Table 3-6: *Advanced Search Selection Criteria Options* for a description of each selection criteria option available.

1. **Make sure you are connected to the Internet and that your Web browser is open.**

   First, you need to choose a Search Engine.

2. **Navigate to a search engine's Web site by typing the Web address into the Address bar.**

   The search engine's home page appears. To perform an advanced search, you need to click the Advanced or Advanced Search hyperlink.

3. **Click the Advanced or Advanced Search hyperlink.**

   As an example, Yahoo's Advanced Web Search page is shown in Figure 3-27. This is where you enter the desired selection criteria in order to refine your search.

4. **Enter the desired selection criteria into the appropriate text boxes.**

   Make sure to choose the most effective keywords when performing a search. When you are finished, click the Search button.

© 2005 CustomGuide, Inc.

5. Click the Search button.

The advanced search produced more specific Web sites ensuring that you have less information to have to sift through in order to find meaningful information. Pretty neat, huh?

NOTE: Another way to search for information strategically is to perform a Boolean search. Boolean search strings (such as AND, &, +, OR, NOT) can be used to effectively narrow or refine a search on an Internet search engine. For example, typing "college OR university" would collate the results of both "college" and "university" to retrieve all unique records containing one term, the other, or both. Typing "poverty AND crime" would retrieve records only in which both of the search terms are present. The more terms or concepts you combine in a search with AND, the fewer records you will retrieve.

Take a look at the following table to learn more about the selection criteria options available for advanced searches. All search engines contain selection criteria similar to these. However, be aware that the wording may be somewhat different.

Table 3-6: Advanced Search Selection Criteria Options

Selection Criteria	*Description*
All Words	The Web page must contain all of the words listed, in no particular order. The words do not have to appear together.
Exact Phrase	The Web page must contain an exact phrase, in a specific order. The words must appear together.
Any Words	The Web page can contain any of the words listed.
Not These Words	The Web page cannot contain any of the words listed.
Where Words Occur	The Web page must contain the words listed in certain parts of the page that you specify. For example, in the title, in the URL, or in the body.
Date	Select a time period that the Web page must have been updated within.
Site or Domain Type	Specify a domain type that the Web page must be. For example, .com, .org, or .edu.
File Format	Specify a file format that the Web page must use. For example, .doc, .xls, or .pdf.
Country	The Web page must originate from the country you specify.
Language	The Web page must be written in the language(s) you specify.
Filter	Most search engines allow you to enable a filter that automatically discards Web pages with explicit content.
Number of Results	Specify the number of results that you would like displayed on the screen at one time.

Quick Reference

To Perform an Advanced Search:

1. Navigate to any Search Engine's home page.
2. Click the Advanced or Advanced Search hyperlink.
3. Enter the desired selection criteria into the appropriate text boxes.
4. Click the Search button.

Chapter Three Review

Lesson Summary

Understanding Key Terms

- HTTP: HTTP stands for Hypertext Transfer Protocol. It is a set of rules for transferring files on the World Wide Web. HTTP files can be text, graphics, sound, video, or any other multimedia file type. HTTP works like this: your browser (for example, Internet Explorer) sends an HTTP request to a server for a certain group of Web pages. The server receives this request and sends the page(s) back to your computer.
- URL: URL stands for Uniform Resource Locator. This is an address for a file that is located somewhere on the Internet. Each URL is unique to the Web page that it links to. Each URL contains a protocol, domain name, resource, and extension. Don't worry about these terms for now, because URLs will be covered more extensively in another lesson.
- Hyperlink: A hyperlink is a link from one word or image to another. Most commonly, a hyperlink will appear on a page as a blue underlined word or phrase, but they can also be images or animations. To use a hyperlink, you simply click on it with your mouse and it will instantly take you to the destination.
- ISP: ISP stands for Internet Service Provider. An Internet Service Provider is a lot like a phone company, except instead of letting you make telephone calls to other people, an Internet Service Provider lets your computer connect to the Internet. Just like your telephone company, Internet Service Providers charge for their services – currently the average rate seems to be about $20 per month for unlimited usage. You've probably already heard of the most famous Internet Service Provider – America Online, or AOL.
- Plug-in: A plug-in is a small piece of software that enriches a larger piece of software by adding features or functions. For example, a plug-in extends the capabilities of a Web browser, such as Microsoft Internet Explorer, by allowing the browser to run multimedia files.
- FTP: FTP stands for File Transfer Protocol. Like HTTP, FTP is a set of rules for transferring files on the World Wide Web. FTP is commonly used to transfer Web page files from the creator's computer to the server. FTP is also used to download files to your computer from another server.
- Cookie: Cookies have a bad rep! A cookie is simply one or more pieces of information that are stored as text files on your computer. A Web server sends the cookie and the browser stores it. Each time the page is referenced, the browser resends the cookie to the original server. Cookies are most commonly used to store frequently used information, such as a user ID number. They are not harmful, as their rotten reputation implies. They cannot transmit viruses, nor can they take any information from your computer back to the server. In fact, cookies can be helpful because they allow a server to recall any user-specific information. This can save you tons of time!
- Cache: You automatically request files when you look at a Web page. These files are stored in a cache. A cache is simply a temporary storage place that is located in a subdirectory beneath the main directory for your browser. Caches are created so that when you return to a page that you have recently visited, the browser can get the page from the cache, rather than going back to the server. This saves time and reduces the amount of Internet traffic. Most Web browsers will allow you to manipulate the size of your cache.

© 2005 CustomGuide, Inc.

- Encryption: When you encrypt something, you are putting it into a code that only authorized people can understand. This prevents unauthorized users from accessing personal or confidential information.
- Firewall: A firewall is a group of related programs that protect a private network from users in other networks. Basically, a firewall screens all incoming information before sending it off to its intended destination so the network stays secure - free from hackers and viruses.

Understanding Web Browsers

- A Web browser is a program that allows your computer to view and navigate the World Wide Web.
- If you are having trouble viewing certain images or animations with your browser, it means that your browser is not compatible with specific software applications or that the browser is out-of-date.
- The two most commonly used Web browsers are Microsoft's Internet Explorer and AOL's Netscape Navigator.

Understanding Web Addresses

- Protocol: The protocol tells the server which type of resource you are trying to locate.
- Domain Name: The domain name indicates the company or individual that maintains the site.
- Resource: The resource can be almost any item, including files, programs, and data.
- Extension: An extension indicates what type of program or code is running the Web site. .htm and .html are the most commonly used extensions.

Understanding Secure Web Sites and Information Quality

- Secure Web Site: A secure Web site contains information not available to everyone.
- User Name: A name, either assigned or chosen by the user, that a person must enter along with a password in order to gain access to a secure Web site.
- Password: A group of characters (usually 4-16 depending on the site) used to determine whether or not the user trying to gain access to a secure Web site is who they claim to be.
- Criteria for evaluating the quality of information found on the Internet include: Relevance, Reliability, Validity, Potential bias, and Sufficiency.

Opening and Closing a Web Browser

- To Connect to the Internet: Double-click the Internet Explorer icon on the desktop. Or, click the Internet Explorer icon on the Quick Launch toolbar. Or, click the Windows Start button and select Internet Explorer from the menu. If necessary, enter your user name and password and click Connect.
- To Close a Web Browser: Click the Internet Explorer window's Close button. Or, select File → Close from the menu.

Displaying a Specific Web Page

- To Display a Specific Web Page: Type the Web address in the Address bar and press <Enter>. Or, press Ctrl + <L>, type the Web address, and press OK.
- To Refresh a Web Page: Click the Refresh button on the toolbar.

Navigating a Web Site and Using Hyperlinks

- To Use a Hyperlink: Click the hyperlink with the pointer.
- To Go Back to the Previous Page: Click the Back button on the toolbar.
- To Go Forward to an Already Viewed Page: Click the Forward button on the toolbar.

Displaying and Deleting a History of Visited Web Pages

- To Display a History of Visited Web Pages: Click the History button on the toolbar. Click the day or week you last viewed the Web page. Click the Web site you want to view again. Click the specific Web page you want to view. Click the History button on the toolbar when you've finished working with your history of recently view Web pages.
- To Delete a History of Visited Web Pages: Select Tools → Internet Options from the menu. If necessary, click the General tab. In the History folder, click the Delete History button. Click Yes. Then click OK to close the Internet Options dialog box.

Adding a Web Page to Favorites

- To Add a Web Page to Favorites: Go to the Web page, select Favorites → Add to Favorites from the menu and click OK. Or, go to the Web page, right-click anywhere on the Web page and select Add to Favorites from the shortcut menu.
- To Go to a Favorite Web Page: Click the Favorites button on the toolbar and select the Web page from the left side of Internet Explorer. Click the Favorites button when you're finished. Or, select Favorites from the menu and select the Web page.

Creating Favorite Folders and Deleting Favorites

- To Add a Folder to Favorites: Select Favorites → Organize Favorites from the menu. Click the Create Folder button. Type a name for the folder. Press the <Enter> key.
- To Add Web Pages to a Folder: Click and drag the Web site until it is positioned over the folder and release the mouse button. Or, select the Web site, click the Move to Folder button, select the desired folder from the list, and click OK.
- To Delete a Web site from Favorites: Select the Web site. Click the Delete button or press the <Delete> key. Click Yes when asked if you really want to delete the Web site.

Saving a Web Page

- To Save a Web Page: Select File → Save As from the menu. Type a name for the Web page in the File name text box. Click the Save as type list arrow and select the desired file type. Click the Save button.

Copying and Pasting Images, URLs, and Text

- To Copy Text or Web Addresses from a Web Page: Select the text or URL that you want to copy. Select Edit → Copy from the menu. Or, press <Ctrl> + <C>. Or, Right-click the selected text or URL and select Copy from the shortcut menu.
- To Copy an Image from a Web Page: Right-click the image you want to copy. Select Copy from the shortcut menu.
- To Paste Text, an Image, or a URL into a Document: Click the Paste button on the Standard toolbar. Or, select Edit → Paste from the menu. Or, press <Ctrl> + <V>. Or, right-click the document and select Paste from the shortcut menu.

© 2005 CustomGuide, Inc.

Previewing and Printing a Web Page

- To Preview a Web Page on Screen: Select File → Print Preview from the menu.
- To Change Print Output Options: Select File → Print from the menu. Or, press <Ctrl> + <P>. Change the options in the Print dialog box.
- To Print a Web Page: Click the Print button on the Internet Explorer toolbar. Or, select File → Print from the menu. Or, press <Ctrl> + <P>.

Downloading Images and Files

- To Save an Image from a Web Page: Right-click the image you want to save and select Save Picture As from the shortcut menu. Navigate to the drive and folder where you want to save the image, give the image a different name (if you want to), and click OK.
- To Download a File: Right-click the file you want to download and select Save Target As from the shortcut menu. Navigate to the drive and folder where you want to save the file, give the file a different name (if you want to), and click OK.

Changing Your Home Page

- To Change Your Home Page: Go to the Web page that you want to set as your home page, select Tools → Internet Options from the menu and click the Use Current button.

Changing Privacy Settings

- To Manage Privacy Settings for a Web Browser: Select Tools → Internet Options from the menu and click the Privacy tab. Specify your options, and when you're finished, click OK.

Selecting a Search Engine

- Search Engines are Web sites that are specially designed to help you find information stored on other sites on the Web.
- To Search the Web for Information Using Internet Explorer: Type the word or phrase you want to search for in the Search text box and click the Search button. Click the link for the Web page you want to look at.
- To Search the Web for Specific Information Using a Search Engine: Type the Web address for the search engine in the Address bar and press <Enter>. Type the word or phrase you want to search for in the Web page's Search text box and press <Enter>.

Performing an Advanced Search

- To Perform an Advanced Search: Navigate to a search engine's home page. Click the Advanced or Advanced Search hyperlink. Enter the desired selection criteria into the appropriate text boxes. Click the Search button.

Quiz

1. When referring to the Internet, what is a cookie?

A. A small piece of software that enriches a larger piece of software by adding features or functions.
B. One or more pieces of information that are stored as text files on your computer.
C. A tasty piece of computer hardware.
D. A temporary storage place.

2. A Web browser is:

A. The world's largest supercomputer that contains and runs the Internet.
B. A spider at the shopping mall.
C. A software application that helps you search for information on the World Wide Web.
D. A software application that allows you to connect with the Internet.

3. Which of the following is NOT a part of a Web address?

A. Resource
B. Extension
C. Domain Name
D. Connection Site

4. What does the extension ".uk" stand for?

A. Ukulele
B. University of Kentucky
C. United Kingdom
D. Ukraine

5. A secure Web site contains information available to everyone. (True or False?)

6. It is recommended that you use your social security number or birth date as your password. (True or False?)

7. The easiest way to display a specific Web page is to:

A. Send a letter to the Web address.
B. Type the Web address in the Address bar and press <Enter>.
C. Type the Web address in the Navigation Pane and press <Enter>.
D. Select File → Address bar from the menu.

8. A Home page is the first Web page you see when you connect to the Internet. (True or False?)

© 2005 CustomGuide, Inc.

9. Which button on Internet Explorer's toolbar brings you back to the page you last viewed?

A. Home
B. Stop
C. Refresh
D. Back

10. Which of the following statements is NOT true?

A. You can add a Web page to Favorites by right-clicking anywhere on the Web page and selecting Add to Favorites from the shortcut menu.
B. You can add a Web page to Favorites by navigating to the page and selecting Favorites → Add to Favorites from the menu.
C. You can view your Favorite Web pages by selecting Edit → Favorites from the menu.
D. You can view your Favorite Web pages by clicking the Favorites button on the toolbar.

11. When you add a Web page to Favorites, you must keep the original name of the site. (True or False?)

12. All of the following are file types that are available when saving a Web page, except:

A. Web Page, complete
B. Web Page, images only
C. Web Page, HTML only
D. Text Only

13. All of the following are ways to paste text, images, or URLs into a document, except:

A. Click the Paste button on the Standard toolbar.
B. Select Edit → Paste from the menu.
C. Right-click the document and select Paste from the shortcut menu.
D. Press <Ctrl> + <P>.

14. There are very few search engines available on the World Wide Web. (True or False?)

15. Which of the following is NOT an advantage of conducting an advanced search?

A. The results of an advanced search cost less than those of a standard search.
B. The results of the search will contain more specific information.
C. You can incorporate multiple types of selection criteria into one search.
D. There will be fewer results to sort through to find the information that you are searching for.

Homework

1. Open Microsoft Internet Explorer.
2. Go to the Yahoo Web site (www.yahoo.com).

3. Add the Yahoo Web site to Favorites.
4. In Favorites, create a folder named “Search Engines.”
5. Move the Yahoo Web site to the new folder.
6. Change Internet Explorer’s home page to the Yahoo Web site.
7. Choose a search engine and navigate to its home page.
8. Perform a basic search by entering the words “chocolate bars” into the Search the Web text box and press <Enter>.
9. Select the URL that appears in the address bar and copy it.
10. Open a word-processing program and paste the copied Web address into a blank document.
11. Close the word-processing program without saving any changes.
12. Save the Web page as an HTML only file.
13. Change the Web page’s orientation to Landscape and the paper size to Legal.
14. Print the Web page.
15. Close the Internet Explorer program.

Quiz Answers

1. B. A cookie is one or more pieces of information that are stored as text files on your computer.
2. D. A Web browser is a software application that enables you to connect to the Internet.
3. D. A connection site is not part of a Web address.
4. C. The extension “.uk” stands for United Kingdom.
5. False. A secure Web site contains information *not* available to everyone.
6. False. You should never use information that could be easily guessed by someone that you know as your password.
7. B. The fastest way to display a specific Web page is to type the Web address in the Address bar and press <Enter>.
8. True. A home page is the first page you see when you log onto the Internet.
9. C. The Back button returns you to the Web page you just left.
10. C. There is no Favorites option under the Edit menu.
11. False. You can change the name of the site so that it is more meaningful, if you would like.
12. B. It is not an option to save only the images that are contained within a Web page.
13. D. Pressing <Ctrl> + <P> would make the Web page print. The shortcut keystroke for pasting text, images, or URLs into a document is <Ctrl> + <V>.
14. False. There are lots of good search engines available on the World Wide Web.
15. A. Using a search engine does not cost anything, regardless of the type of search you are conducting.

© 2005 CustomGuide, Inc.

Chapter Four: The Impact of Computing and the Internet on Society

Chapter Objectives:

- **The E-world**
- **People vs. computers**
- **Computers in business**
- **Computers in government**
- **Understand good working conditions**
- **Understand information security (passwords, backing up data, etc)**
- **Understand computer viruses**
- **Understand copyright concepts, Freeware, Shareware, and EULAs**
- **Understand how computers affect the environment**

☑ **Prerequisites**

- Basic knowledge about computers.

"Computing is not about computers anymore. It is about living." –Nicholas Negroponte

Since the Industrial Revolution, technology continues to change the way we live, work, and play. The most influential modern technology is the computer, which allows communication, information processing, and production to occur much faster. For example, computers have made industrial manufacturing more accurate and efficient and the disposal of hazardous waste safer. However, there are still many instances where a computer could not replace a human.

This chapter will highlight areas in which the computer has changed and enhanced everyday life, and examine how modern technology has changed the quality of life in work, government, education, homes, and daily life, and discuss instances where computers or people are appropriate. You will also learn about health and environmental issues, and what you can do to help prevent any injuries or problems.

Lesson 4-1: The E-world

Figure 4-1

Messages can be sent across the world in seconds with e-mail.

Figure 4-2

Secure servers help make online shopping more safe and convenient.

Figure 4-1

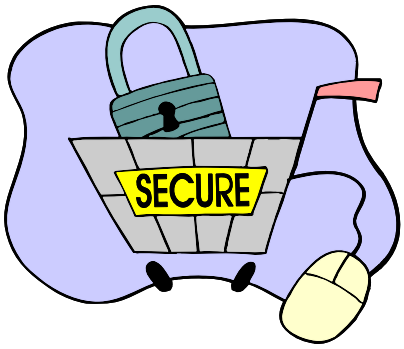


Figure 4-2

IC3

Objective: 3.4.1.1, 3.4.1.3, and 3.4.1.4

Req. File: None

The last chapter taught us the basics of using the Internet. This chapter focuses on how computers and the Internet affect our everyday lives.

The following list acknowledges several of the many activities and services that computers and the Internet help facilitate:

- **Collect information:** Search the Web and/or conduct interviews via e-mail to collect information for a school paper.
- **Organize information:** Utilize your bank's Web site and/or financial management software to keep track of all your accounts.
- **Evaluate information:** Search the Web and utilize spreadsheet software to evaluate potential prices for a new product against those of competing products.
- **Communicate information:** Use e-mail or an Instant Messaging program to communicate with others no matter what their geographical location.
- **Increase productivity:** Computers allow you to complete things quickly and easily, thus increasing your productivity in the workplace.
- **Collaborate with others:** Utilize Message boards, chatrooms, and e-mail to keep in touch with others no matter what their geographical location.
- **Solve real-world problems:** Search the Web to find information regarding anything you can imagine! Health, finance, relationships, snow shoeing—there's a Web site for just about everything these days.
- **Facilitate learning and promote critical thinking:** Learn for fun at home or strive for your college degree via online programs and Computer-based training (CBT).
- **Promote creativity:** Suffering from Artist's Block? Look up your favorite artist online for inspiration. Need help creating a Web site? Utilize Web-authoring software.

Over the past few years, a whole new prefix has been added to language, thanks to computers and technology: *e* for electronic. There are *e*-mails, *e*-commerce, *e*-books, *e*-businesses, and anything else that can now be done electronically. E-mail is probably the most popular of all of these words. Millions of people across the world communicate using e-mail, where a message can be sent to another person instantly, to or from anywhere in the world. Another advantage with e-mail is that files can be sent to others as attachments to the message.

© 2005 CustomGuide, Inc.

E-commerce is also growing in popularity. E-commerce is a collection of Internet features and services that allow individuals and organizations to perform commercial transactions using the Internet. Companies see the appeal in selling more products and services with less of an overhead cost, while people are choosing to avoid the crowds at malls and supermarkets altogether by shopping online. E-commerce also gives individuals the ability to comparison shop and find the best quality product without having to leave home. Individuals can also find rare and discontinued items from sites such as online vendors and auction sites. Organizations can benefit from e-commerce as well, given that selling products over the Internet eliminates the need to maintain physical sales locations, thus allowing organizations to sell more efficiently and cost-effectively.

E-learning is another popular electronic trend. E-learning provides inexpensive training and learning opportunities for people of all ages, income levels, and backgrounds. Children now can learn to read by utilizing a computer, and stay-at-home moms can obtain a college degree or certification through online programs.

Computers and the Internet provide many public services to the community as well, such as Web cafes and public Internet centers, which allow people looking for work to take part in online training, resume creation, and online job searches.

Quick Reference

The E-world:

- Common daily economic practices are becoming available electronically, such as shopping, business, and trade. E-mail communication is growing in importance all the time, as well as e-learning, which provides inexpensive training and learning opportunities for people of all ages, income levels, and backgrounds.

Lesson 4-2: People vs. Computers

Figure 4-3
The debate over whether computers or humans have superior intelligence is ongoing.

IC3

Objective: 3.4.1.1 and 3.4.1.2

Req. File: None

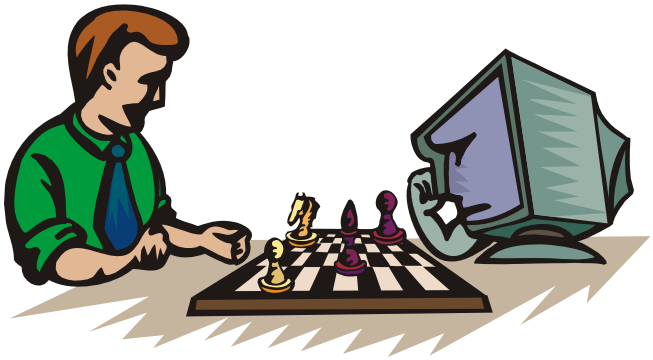


Figure 4-3

Science fiction has been predicting how computer technology will someday equal and even surpass human intelligence for years. Characters such as Lieutenant Data in *Star Trek* illustrate an artificial intelligence that surpasses the human mind in storing information and the ability to learn new things, such as languages and procedures. In some cases, the possibility of artificial intelligence ultimately overpowering humans is explored, as seen in the *Terminator* movies. We do not yet see the limit of technology's abilities, but science is still a long way from producing a computer that matches the human mind's processing power.

Over the past few decades, we have watched computers advance and grow into every facet of our daily lives. Today, computers replace many jobs that required human work in the past. On the other hand, many jobs have been created to help develop and maintain computer technology. The question of sheer processing superiority of man vs. computer is still in debate. But in the end, no matter how far technology advances, it will never have the ability to have feelings, to adapt to our surroundings, or to think creatively as we do.

Here are a few examples of situations where a computer or a person is most appropriate.

Table 4-1: People vs. Computers

Tasks for People	*Tasks for Computers*
Human Touch: Tasks that deal with emotion, such as discussing personal matters in counseling or at the hospital. Artificial intelligence cannot relate to feelings or emotion. People naturally desire to speak with other people; not a computer.	Dangerous Situations: Tasks that could jeopardize human safety, such as the disposal of hazardous waste or space exploration. Computerized machines can perform in places and conditions that a human body can not endure.
Creativity: Tasks that require imagination or abstract thought, such as art or problem solving. Computers are limited; they cannot deviate from the information programmed into their systems.	Repetition: Tasks that require repetitive actions, such as tasks in factory assembly lines. Humans can endure physical and mental fatigue from repetitive tasks, and are not as efficient or accurate as computers.

© 2005 CustomGuide, Inc.

Tasks for People	*Tasks for Computers*
Environment: Tasks that require processing unexpected data from the immediate environment, such as combat or security enforcement. Computers do not have senses or intelligence to process data from their surroundings.	Calculations: Tasks that require mathematical calculation, such as accounting. In spreadsheets, a computer can calculate and recalculate figures in seconds what might take hours or days to do manually.
Shape Recognition: Tasks that require shape recognition, such as lab work or research. For example, computers cannot discern pattern differences between healthy and cancerous tissue.	Automation: Tasks that can be programmed to deal with anticipated input, such as a telephone answering service or Automated Transaction Machine (ATM). Business can save a lot of money by using computers instead of people for these tasks.

Computers may eventually be able to do more “human” things as technology develops. One reference point for man vs. computer intelligence is in chess, which compares human strategy and intuition to cold computer calculation. The first man vs. machine chess contest, grandmaster Garry Kasparov vs. Deep Blue was won by the IBM supercomputer in 1997. However in February 2003, the first annual FIDE (International Chess Federation) Official World Chess Championship of Man vs. Machine gave Kasparov another chance against a computer, the Israeli-programmed Deep Junior. This time the match ended in a draw, proving that computer intelligence is not yet superior to humans.

Even with time for advancement, Kasparov believes that humans will prevail on the chessboard. “In my view, in 10 years' time, the best human player could beat a machine one single game on our best day. It proves we are still better, because we cannot guarantee the same intact performance for six or eight playing games, while a machine could play for 100 games,” he said.

Quick Reference

People vs. Computers:

- There are many differences between artificial and human intelligence, though each has its own niche and purpose in society. For example, computers are good for repetitive tasks, while humans think creatively and intuitively, unlike a computer’s calculation.

Lesson 4-3: Computers in Business

Figure 4-4

Many companies have found that advertising on the Internet increases sales dramatically.

Figure 4-5

Computers increase efficiency, but this often means that people have more work to do as well.

Figure 4-4

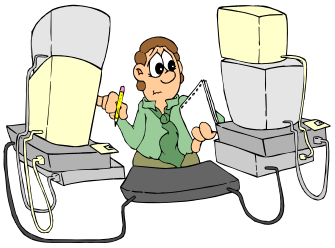


Figure 4-5

Computers operate "behind the scenes" in many everyday situations. This day and age, we rely on computers more than we might realize. Take a step back for a moment and imagine what an office would be like without computers. How would you communicate with co-workers? What would you use to present a business proposal or marketing strategy? How would you keep track of communication with clients? If your working environment is similar to the majority of businesses today, the tasks mentioned above seem tedious and nearly impossible without a computer at your fingertips. The table below elaborates on a few of the specific areas that have changed significantly with the introduction of computers.

IC3

Objective: 3.4.1.1, 3.4.1.2, 3.4.1.3, 3.4.3.3, and 3.4.3.6

Req. File: None

Table 4-2: Computers in Business

Business Areas	*Changes and Improvements*
Banking	Automatic Transaction Machines (ATMs) allow clients to do their banking without a bank teller. Internet banking allows bank clients to make deposits, transfers, and check on balances. Transferring or wiring money is possible both nationally and internationally. Increased automation in banks decreases employee overhead, saving banks a lot of money; however, there is a level of insecurity in online banking.
Stock exchange	Buying and trading of stocks is available online. Checking on the status of stocks and bonds through the Internet is very popular.
Advertising	Web page ad banners, pop-up windows, and mass e-mails add a new dimension to advertising. Bidding for top spots on search engines is a popular and successful way to gain exposure.
Accounting	Spreadsheet programs with capability of automatic calculations have reduced human error, and make it easier to plan strategy.
Management	Software has been produced to help manage productivity and assessment, such as time clocks.

© 2005 CustomGuide, Inc.

Business Areas	*Changes and Improvements*
Project management	Software has been produced, such as Microsoft Project, to help manage and assess project costs, deadlines, and progress.
Group working	Programs that facilitate e-mail and project networking help group communication and assessment stay up to date.
Office automation	Calendars, customer administration, electronic contacts and production keep office communication efficient and inexpensive.
Transportation/ Airline traveling	Many airlines provide the option to purchase tickets online on their Web sites. Computerized booking systems enable e-tickets (which eliminate the need for paper tickets) and other features that make air travel more friendly and convenient for customers.
Insurance	Most insurance companies use large-scale computer systems and specialized software to manage insurance policies and file insurance claims.

Computer systems owned by schools, businesses, and other organizations are normally governed by laws or rules of proper use, and every user has an obligation to know and understand these rules. For example, some computer systems owned by businesses may have rules or guidelines regarding when information can or cannot be considered personal, such as who owns data that is stored on the system. While rules covering employer-employee relations regarding computer use may vary, an individual has more rights to information created on a computer that they own than they do on equipment that is owned by someone else. If you are unsure of your company's policies, make sure to contact your system administrator.

Quick Reference

Computers in Business:

- Computers operate "behind the scenes" in many everyday situations.
- Computers have changed a lot about the conduct of business. For example, online banking, airline booking systems, and administration systems are all available and improved with computers.

Lesson 4-4: Computers in Education

Figure 4-6

The Three R's and One C: computer literacy skills have become as important as reading, writing, and arithmetic.

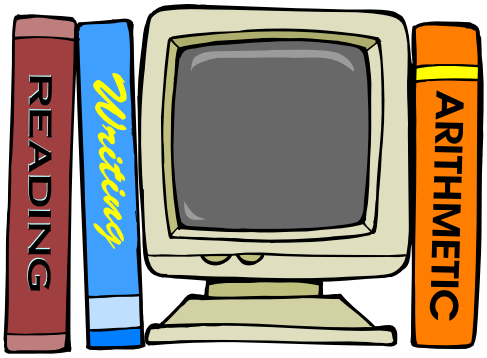


Figure 4-6

IC3

Objective: 3.4.1.2, 3.4.1.4, 3.4.3.3, and 3.4.3.6

Req. File: None

A college campus is probably the only place where it is acceptable walk around in public in your pajamas. But with today's technology, students don't even have to leave their room.

Computers are becoming helpful tools in classrooms of all levels and ages, allowing educators to teach in new and exciting ways. For example, instead of printing and evaluating write-in tests, teachers can use specialized software programs to create, administer, and evaluate tests on a computer. Administrative branches are using software to improve student registration and class scheduling or timetabling as well.

In some cases, computers are actually replacing the need for an instructor, as in computer-based training (CBT). In CBT, an individual uses his or her computer to learn a subject from a CD or DVD. This is especially popular for individuals who wish to learn without actually taking a course.

Another growing trend is distance learning, which dissolves the need for a classroom setting. This can take place through e-mail correspondence, or by the use of Webcast technology which allows a student to watch and hear a lecture over the Internet in real-time.

Students are experiencing advantages to using the computer in homework as well. Word processing makes writing papers and class presentations much easier, while software programs are available to reinforce and exercise learning outside of the classroom. The Internet is also a great tool for researching homework assignments. However, because many informative sites require a user account or fee, it's sometimes easier and cheaper to use library resources.

Currently, most schools have access to basic computer and Internet technology. However, as technology advances and becomes more prevalent in education, a balance between some of the advantages and disadvantages of computers should be considered. Take a look at the following table for some advantages and disadvantages of incorporating technology into the classroom.

© 2005 CustomGuide, Inc.

Table 4-3: Pros and Cons of Computers in Education

Advantages	*Disadvantages*
Independent learning: Students can learn at their own pace, at any time of the day.	Limited feedback: If students are confused or want more information, the computer offers limited or no feedback.
Distance learning: Students can take part in a class that takes place miles away from the actual classroom. One person can also reach more people this way.	Peer absence: Students don't experience the support of peers in their learning.
Homework is easier: Computers make it easier to research and finish assignments, and educational software programs make learning fun.	One point-of-view: If students do not initially grasp a concept, a computer cannot offer an alternative method or a creative analogy to help students understand.

Computer systems owned by schools, businesses, and other organizations are normally governed by laws or rules of proper use, and every user has an obligation to know and understand these rules. For example, some computer systems owned by schools may have rules or guidelines regarding when information can or cannot be considered personal, such as who owns data that is stored on the system. While rules covering school-student relations regarding computer use may vary, an individual has more rights to information created on a computer that they own than they do on equipment that is owned by someone else. If you are unsure of your school's policies, make sure to contact your system administrator.

Quick Reference

Computers in Education:

- Computers are affecting how teachers and students interact, are making education more available with distance learning and online classes, and students are using them to do homework. Administrative tasks like timetabling and class scheduling are improved as well.

Lesson 4-5: Computers in Healthcare

Figure 4-7

Technology like the CAT scan is helping doctors treat patients with more accuracy and skill than ever before.

Figure 4-7

IC3

Objective: 3.4.1.2 and 3.4.1.4

Req. File: None

Computers are helping the healthcare industry take long strides in treating, diagnosing and preventing almost any ailment. We already know about computers that monitor the vitals, like pulse, breathing, and blood pressure in hospital rooms, but the more advanced technology is what is really changing lives. Technology like CAT (*Computer Axial Tomography*) scans let us look inside people without making an incision. LASIK (*Laser-Assisted In Situ Keratomileusis*) eye surgery changes the cornea to correct vision. Research is even being done for Internet surgery, which would enable a doctor to perform surgery from a distance through a system of computers, fine-tuned robots and a fast connection.

Hospitals are using computers increasingly to keep track of appointments for the day, and to store patient information and records. Electronic files are not only easy to update and retrieve, they are easy to save and they require less storage space. Electronic files are also easier to access from other locations. Some doctors even use handheld computers like Palm Pilots to keep track of their schedule, which can also upload patient information. However, because it is critical to keep patient information confidential, system security is very important.

Computers are helping to treat and control emergency situations as well. Global positioning systems and navigation technology are helping ambulances and emergency vehicles get to where they need to be faster. Technology used in the ambulance can also help emergency rooms know exactly what to expect before the ambulance arrives.

Technologies have also been developed to help the physically handicapped to live, work, and communicate. Voice recognition software for the blind is just one of the many ways technology has evolved in order to support and provide opportunities for the disabled and disadvantaged.

Quick Reference

Computers in Healthcare:

- Computers in healthcare make diagnosis and treatment much easier for the patient and doctor. Electronic files and administrative tasks are also easier using computers.
- Technologies have also been developed to help the physically handicapped to live, work, and communicate.

© 2005 CustomGuide, Inc.

Lesson 4-6: Computers at Home

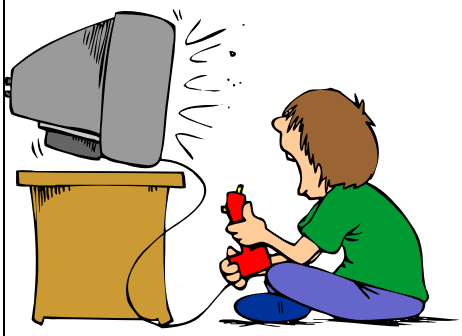


Figure 4-8

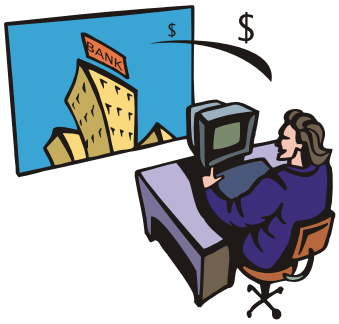


Figure 4-9

Figure 4-8

Using computers for entertainment is very common.

Figure 4-9

The Internet and online baking systems allow you to check your bank accounts from home.

IC3

Objective: 3.4.1.2 and 3.4.1.3

Req. File: None

Though we don't have robots to do our work like the futuristic Jetsons, people are using the computer to help complete daily tasks—all without having to leave home! Individuals and families use the computer for a number of purposes, such as bill paying, entertainment, or research and study. Here are a few ways people use computers in the home:

- **Entertainment:** Computer games have become so advanced that PCs are often built with their ability to support games in mind. In fact, Sony's PlayStation and Microsoft's Xbox are computer systems made exclusively for playing games.
- **Banking:** Software programs that keep detailed records of finances and budgets are available. Most banks also offer online banking to perform transactions, pay bills, or check on balances.
- **Communication:** Computers are useful tools for keeping in touch with family and friends with e-mail, or to write and print letters.
- **Internet:** The Internet can be used for shopping, entertainment, research, or communication.
- **Teleworking:** Computers were first brought into the home for entertainment or to help with household business, but teleworking—also known as telecommuting or working from home—is a growing trend in businesses. Teleworking refers to an arrangement between a company and employees where employees are allowed to work from another location via a computer connection. There are many advantages and disadvantages for both parties in such an arrangement.

Table 4-4: Teleworking Advantages and Disadvantages

Advantages	*Disadvantages*
No commuting time	Decreased employee interaction and camaraderie
Reduced company costs for office or desk space	Less emphasis on teamwork
Flexible schedule	High self-discipline is necessary

Quick Reference

Computers at Home:

- Computers make many home functions easier, such as banking, communication, and entertainment. Some companies even offer the option for teleworking, (working from home) to its employees.

Lesson 4-7: Computers in Industry

Figure 4-10

One engineer can control many computers or robots on an assembly line.

Figure 4-11

Machines powered with computer intelligence help factory workers in their jobs.

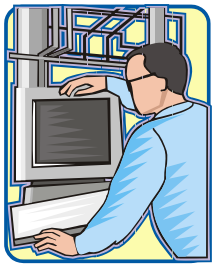


Figure 4-10

Figure 4-11

IC3

Objective: 3.4.1.2

Req. File: None

Over the past few decades, industry is an area that has seen substantial change with the use of new technology. Not only do computers and robots keep humans out of dangerous areas, they are more efficient and require a fraction of the time and human personnel to do the same amount of work. For example, computers and robots, not humans, do most of the manufacturing and assembly work in automobile plants.

Here are some advantages and disadvantages of computers in industry.

Quick Reference

Computers in Industry:

- Many tasks in factories and industry-related jobs have been made safer and more human-friendly because of computers.

Table 4-5: Computers in Industry

Advantages	*Disadvantages*
Efficiency: Computers and robots do not experience fatigue or injury from repetitive actions.	Loss of Employment Opportunities: Jobs are being replaced by robots and computers, resulting in higher unemployment rates.
Accuracy and Speed: Actions are consistently performed accurately and quickly.	Reaction: Computers cannot react to unforeseen circumstances or process new information.
Re-programming: If changes are introduced, robots and computers are easy to re-program to implement changes.	Cost: Some tasks are so short that it would not be cost-effective to program a robot or computer for the task.
More Employment Opportunities: Computers have replaced some jobs, but have created many jobs as well.	
Safety: Some tasks, such as hazardous waste disposal, are much safer and easier with the use of technology.	

© 2005 CustomGuide, Inc.

Lesson 4-8: Computers in Government

Figure 4-12

Figure 4-12

Central computer systems with public information like vehicle registration helps police and other branches of the government do their jobs.

IC3

Objective: 3.4.1.2 and 3.4.1.3

Req. File: None

We all know that governments can be inefficient and bogged down with bureaucracy and that they sometimes lack the funds to fix their own internal and managerial problems. In many cases around the world, governments are learning to use the computer to their advantage, eliminating some levels of bureaucracy and helping others to be more efficient and effective. Here are a few ways governments are using computers and technology to help do their work.

Table 4-6: Computers in Government

Gov. Function	*Description*
Public records	Instead of storing files in rooms upon rooms of file cabinets, public records can be kept electronically, which also makes them easier to retrieve and search through. For example: Census: Census results are entered in a database which makes the information easy to access and process, such as predicting and researching trends in the population. Sometimes this information is also available online. Vehicle registration: All registered vehicles are stored in a central database, which makes the information easily accessible for security services, such as the police and customs.
Revenue collection/ Taxes	Many people choose to file their taxes electronically through the Internet, which is faster and easier to process than paper and mail. Tax refunds or pay-ins can also be executed electronically, which eliminates mailing time and is convenient.
Voting	Electronic voting is being tested with hopes to increase voter participation. Security considerations need to be perfected before this option is widely available.

Quick Reference

To Computers in Government:

- Governments are using computers to help store records, collect taxes, and some are even trying to make voting available electronically.

Lesson 4-9: Ergonomics

Figure 4-13

A few examples of good ergonomics.

IC3

Objective: 3.4.2.1 and 3.4.2.2

Req. File: None

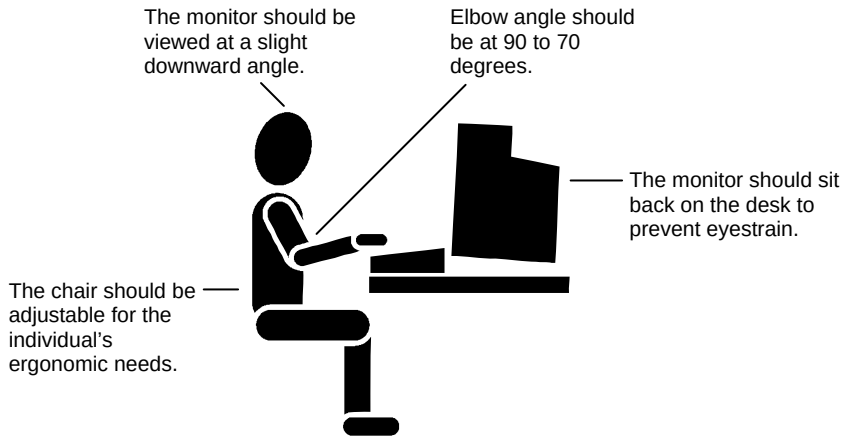


Figure 4-13

We've all heard of ergonomics, but have probably brushed it off as old information: sit up straight, take breaks, etc. But ergonomics is more than just sitting with both feet on the floor; it is the application of scientific information concerning humans to the design of objects, systems and environment for human use. In other words, whenever something is created or designed, ergonomists want to make sure it is friendly to the way we operate. And, they want to make sure that people understand the best way to use that equipment.

So why should you care about ergonomics? In the case of computers, good practice of ergonomics keeps you healthy and injury-free, which makes long hours at the office not seem very long. Keeping you comfortable will raise your productivity and increase job satisfaction, which will make you and your boss very happy as well.

In addition to the diagram above, here are a few tips the experts have to say about good working form.

- **Work smarter, not harder:** Your eyes and body need a break from the computer just as much as your mind, because we are not designed to sit at such a close distance for a long period of time. The following is a suggested break schedule to maximize your eyes and body safety.

  Micro-Break: This break is only for about 10 seconds and should be taken about every 10 minutes. Look far away from your terminal (at least 20 feet) and breathe and blink easily. Keep your eyes moving while looking at different distant objects. This should not interfere with your work or your concentration.

  Mini-Break: Take this break about every hour; it should last about five minutes. Stand up and stretch. Try doing eye exercises during this break so the eyes can flex and be used in different seeing situations.

  Maxi-Break: This could be a coffee break or lunch. The maxi-break is a "get up and move" type of break that will allow your blood to start flowing again and get you more energized. This kind of break should be taken every few hours.

© 2005 CustomGuide, Inc.

- **Lighting:** Bright surrounding lights are the source of many eye strain complications. Dim your work area's lighting to reduce glare, and shield your eyes from bright light sources. Doing this will reduce competition from surrounding light sources, so your eyes can focus on light from the computer screen.
- **Seating:** Chairs should have adjustable features for the chair's height, the armrests, and the backrest. This should accommodate each individual's ergonomic needs.
- **Monitor:** The monitor should be viewed at a slight downward angle. A good reference point is if your eyes are level to the top of the screen or higher. You may also want to use a monitor filter to reduce the glare on your eyes.
- **Keyboard:** Use a responsive keyboard so that you don't have to pound the keys to type. Using a keyboard pad will also help reduce the pressure in your wrists.
- **Mouse:** Mouse mats ease the use of a mouse; mouse pads are also available on which to rest the wrist to alleviate pressure while using a mouse.
- **Feet:** A footpad or step on which to rest your feet may help individuals with short legs or in situations where the desk or chair cannot be adjusted.
- **Environment:** In addition to using your computer equipment correctly, the environment in which you work should be conducive to your human needs. The work area should be comfortable with a moderate temperature and adequate ventilation.

Quick Reference

Ergonomic:

- Practice good ergonomics when using the computer to prevent injury and enhance productivity.

Lesson 4-10: Computer-related Injuries

Figure 4-14

Eye strain is a common ailment for computer users.

Figure 4-15

A sore back can result from poor posture or sitting for prolonged periods.

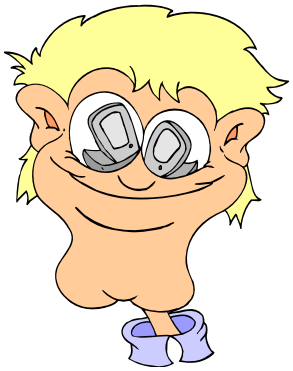


Figure 4-14

Figure 4-15

IC3

Objective: 3.4.2.2

Req. File: None

Computers are meant to increase productivity, but not at the expense of our health. Years of computer use have taught us that some injuries are common for individuals who use computers. Because most computer use is work-related, many countries have laws that require employers to pay for the prevention of these injuries, such as buying ergonomic devices or seminars, and the treatment of these injuries, such as wrist braces or surgery. Check the laws in your country so you can avoid and/or treat this debilitating condition.

- **RSI (repetitive strain injury):** This type of injury is caused when certain muscles are used repeatedly over a long period of time, resulting in muscular strain or damage. The wrists and forearms are especially susceptible. A keyboard or mouse used at the wrong level, or a poorly placed monitor can also cause these injuries.
  Prevention: Take frequent breaks and make sure the workspace is ergonomically adjusted for individual needs.
- **Eye strain:** Our eyes are not meant to focus on close objects, like monitors, for long periods of time. Other factors like glare from the screen or reflections from other objects in the room can further irritate vision.
  Prevention: Don't stare at the screen for hours on end; look away and focus on far distances to exercise your eyes, in addition to taking frequent breaks. You can also use eye-friendly hardware, like monitor filters, or LCD screens to reduce glare. Also, monitors with higher resolutions and more pixels per inch (ppi) are better for the eyes.
- **Back strain:** Prolonged sitting with poor posture can cause a number of back and shoulder ailments.
  Prevention: Good chairs that are adjustable can help correct posture. Again, taking breaks helps alleviate some of the strain of sitting in the same position for extended hours.

Quick Reference

Health Issues:

- Computers are meant to increase productivity, but not at the expense of health. Common injuries sustained from prolonged computer use are repetitive strain injury, eye strain, and back strain.

© 2005 CustomGuide, Inc.

Lesson 4-11: Maintaining a Safe Working Environment

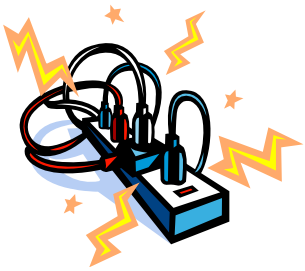


Figure 4-16

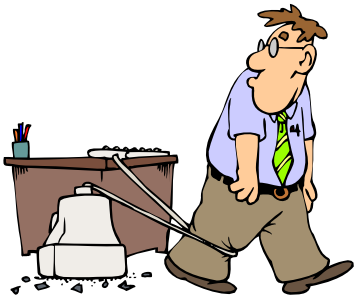


Figure 4-17

Figure 4-16

Too many plugs in one outlet can be dangerous.

Figure 4-17

Cords are potential hazards for individuals and computers.

IC3

Objective: 3.4.2.1

Req. File: None

In addition to practicing good ergonomics, it is essential that you maintain a safe working environment that complies with legal health and safety rules. Nobody wants to leave their office with a broken limb or electric burns; that's why keeping a tidy workspace and office is important.

Computers are notorious for the jumble of cables and wires that are required to make them run, and it's not unusual for a computer to have ten connections running from it at one time. Such wires and cables around the desk space are accidents waiting to happen. It's a good idea to take precautions to prevent tripping or equipment damage that could result from getting caught in one of these cables or cords by shortening them to the necessary length and by taping down cables that run along the floor.

The holes and sockets that these many cables connect to should be examined as well. For example, examine plugs, sockets, and leads for defects and repair any irregularities. And, if there are a lot of electrical devices plugged into one outlet, have a professional install another outlet nearby to spread out the power demands evenly. Make sure to leave proper air circulation around electrical equipment as well, to prevent over-heating.

Common sense is the simplest and most basic precaution. Leaving clutter around the office and blocking pathways is not only counter-productive and discourteous to co-workers, it is also not in compliance with fire and safety codes.

Quick Reference

Prevention:

- In addition to practicing good ergonomics, prevent broken equipment or bodily injury by keeping your workspace and walking areas clear and distributing electrical plug-ins wisely.

Lesson 4-12: Information Security

Figure 4-18

Information Security is very important in protecting your computer and its contents.

Figure 4-19

Firewalls protect your organization's network from harmful viruses and hackers on the Internet.

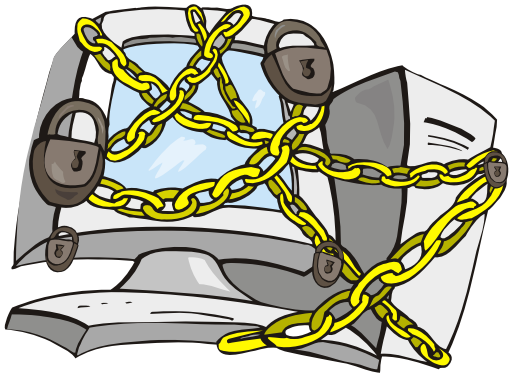


Figure 4-18

Figure 4-19

IC3

Objective: 3.4.2.3, 3.4.3.1, and 3.4.3.5

Req. File: None

Security is a sensitive issue. We hire security officers to protect our workplaces, analyze national security efforts, and install security systems in our homes. Information security is another type of security that isn't widely understood, but is just as important as protecting the valuables in your home.

The U.S. National Information System Security Glossary defines **Information security** (**INFOSEC**) as:

> "the protection of information systems against unauthorized access to or modification of information, whether in storage, processing or transit, and against the denial of service to authorized users or the provision of service to unauthorized users, including those measures necessary to detect, document, and counter such threats."

In short, information security is taking measures to protect your computers and network systems from tampering by hackers or viruses. This includes creating passwords and security policies, backing up information, and using security features like Firewalls. If information security is neglected and someone breaks into your system, they can easily access the sensitive information on your computer and other computers on the network, such as account numbers, passwords, and e-mails. Once they gain access, not only can they steal information, but they can also embed a virus or program that damages information on the entire network, possibly resulting in huge financial loss by the victimized organization.

Some organizations may **restrict access** to certain data in order to protect secure or important data; such as confidential information in a school, hospital, or government agency; or customer credit card information stored by a business. Such restrictions include barring access to files, storage devices, computers, networks, the Internet, or certain Internet sites. The types of tools and strategies used to restrict access to data include keeping restricted information on secure computers, or keeping information behind firewalls or other security systems.

© 2005 CustomGuide, Inc.

Some users may want to restrict access to portions of the Internet as well, such as parents trying to prevent children from accessing adult Web sites or companies that want employees to avoid shopping while at work. The types of tools and strategies used to restrict access to certain Internet sites include installing Internet-blocking software, or personally supervising computer users.

One of the most important preventative measures that an organization can take is to adopt an **enforced information security policy**. Though each organization has different security requirements, the need for security policies to provide standards and actions is definite. When a security policy is implemented, everyone using the network handles information the same way, minimizing the number of loopholes where hackers can bypass the system. Security policies also make it easier to track individuals who do not adhere to policy rules. If an information security problem does occur with sensitive information, having proof that the organization took steps to try and prevent such an incident could reduce repercussions.

It is also important that everyone knows how to report a security incident. If a computer is not working correctly, employees should be able to identify that there is a problem, know who to contact, and know what they should do with their computer so the situation doesn't intensify. A standard procedure should also be to document the situation to prevent future occurrences.

We know what an enforced information security policy can do, but what can *you* do to protect your privacy and personal security online?

- Understand how Web sites track your activity online using "cookies" or other "behind-the-scenes" systems.
- Do not share personal or family information to unknown people or in public places while online.
- Use code names or "aliases" when communicating in public forums.

In the end, the best defense against a security problem is individual users. If everyone connected to the network is aware of security risks and how to handle them, security problems can be avoided and fixed quickly. Users should also be aware of the consequences if security policies and procedures are not heeded.

Quick Reference

Information Security:

- In short, information security is taking measures to protect your computers and network systems from tampering by hackers or viruses.
- One of the most important steps an organization can take is to adopt an enforced information security policy.
- Some organizations may restrict access to certain data in order to protect secure or important information.
- It is important that individual users are aware of security risks and how to handle them.

Lesson 4-13: Working with Passwords and User IDs

Figure 4-20

In a computer network, it is important that each user has privacy.

Figure 4-21

Each user of a network should be assigned a user ID and password that is only known by the user and grants access to their individual account.

Figure 4-20

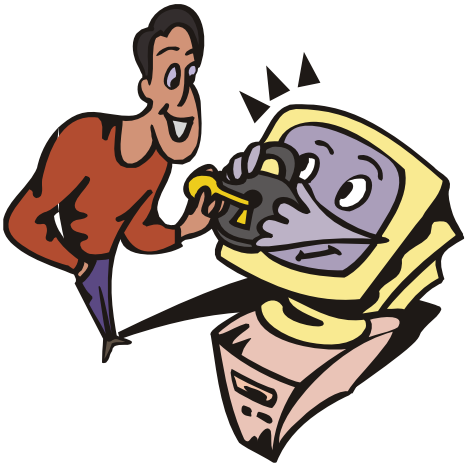


Figure 4-21

IC3

Objective: 3.4.2.3

Req. File: None

In a network of computers hooked up to one another, ensuring privacy for every user is a very serious issue. Proper security measures must be taken in order to secure your computer from "hackers," or unauthorized personnel attempting to gain access to your computer or network. Hackers can wreak havoc on your computer or network by passing along viruses or even spying on personal files that you assumed were secure.

One precaution that is being taken in order to protect computer systems from hacker attacks is by assigning user IDs and passwords to each user in the network. User IDs uniquely identify the user on the network, while the password, known only by the user, grants access to the individual account. This combination of unique information opens the account to its individual settings and access rights on the network.

Access rights also control privacy. Access rights determine where you can go in the network and are different for each individual. For example, the site administrator has access to just about every computer or printer in a network, but most individuals are limited to specific folders and printers, as defined by the site administrator. Access rights are often helpful in managing the information of different departments: individuals in the engineering department wouldn't have access to human resources files.

Since a password is a main line of defense against attackers, it is important to adopt a password policy. A password policy sets standards for strong passwords, or passwords that aren't easily compromised or guessed by others. Passwords are generally 4-16 characters long. They are used to determine whether or not the user that is requesting admittance to the secure Web site is actually the person they claim to be. Passwords generally do not have spaces. When you enter your password into the text box, it is usually replaced with bullets or another symbol so that no one else can read it off of your screen. A good password is a mixture of letters and numbers. This makes it much more difficult for someone to guess it. Also, don't use a word or number that someone who knows you well could easily guess (for example, your social security number, pet's name, or birth date). It's also a good idea to change your passwords periodically.

Quick Reference

Privacy Issues:

- User ID: A user ID uniquely identifies the user on a network.
- Password: A password grants a user access to their individual account.
- It is important for organizations to adopt a password policy because passwords are a main line of defense against attackers.

© 2005 CustomGuide, Inc.

Lesson 4-14: Backing up Data and Preventing Theft

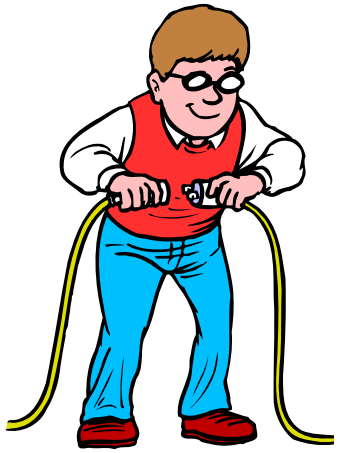


Figure 4-22

Figure 4-23

Figure 4-22

Backing up data makes it easier to recover from natural disasters – such as a power outage.

Figure 4-23

Prevent the theft of your sensitive files by password protecting them.

IC3

Objective: 3.4.2.3

Req. File: None

Back up data

Everyone who has lost data because of a crashed computer knows how frustrating it is to redo all of your lost work, and what a relief it is to have a saved backup copy. Now imagine the agony of an entire organization losing their data because of a security breach. Taking a few moments to back up data on a storage device could save a lot of time and money.

Backing up data and software to another storage device makes recovering from a security incident much easier, but it also protects you from uncontrollable factors, such as storms, fires, or other natural disasters that could ruin your equipment. Sometimes multiple copies of backup data are saved in different locations so if one copy is destroyed, another copy is saved safely elsewhere. Protective storage, such as a fireproof case, is also a wise investment.

Everyone is responsible for backing up his or her own data, and this should be part of an information security policy. Usually network administrators back up the data on a network from a centralized location, but individual users should also back up their own data on a regular basis. Computers store a lot more information than is usually available on a storage device, so you'll usually only want to backup data, not software. Site administrators can make backing up software automated by buying software that automatically backs up files on a computer.

Preventing theft

When organizations develop security policies, it's easy to get so caught up in procedures and firewalls that they overlook how to protect their physical property. If a hacker can't get the information they want electronically, they can do much more damage by acquiring the actual equipment in which the information is stored.

Theft of a laptop computer, desktop computer, PDA, or mobile phone should always be reported to your company's technical support department immediately, and your service provider should also be contacted in case of a missing phone. Computers with startup passwords have some protection, but determined attackers can still get through these barriers. Sensitive files with password protection are another crucial line of defense against theft. The contact information on a PDA or mobile phone is also valuable, and your professional image could be damaged if the contact information of business associates or clients is abused.

Quick Reference

- Backing up Data: Backing up data and software makes recovering from a security breach or a natural disaster much easier. Network administrators usually back up a network's data from a centralized location, but individual users should also back up their own data on a regular basis.
- Preventing Theft: Always report the theft of a computer, PDA, or mobile phone immediately. It is a good idea to create a startup password for your electronic device, but an even better idea to password protect any sensitive files that are contained on the device.

Lesson 4-15: Computer Viruses

Figure 4-24

Malicious programmers create viruses that infect computers.

Figure 4-25

Computers are unresponsive and inefficient when infected with a virus.

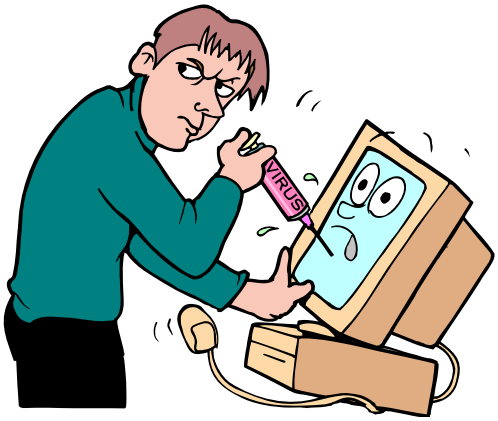


Figure 4-24

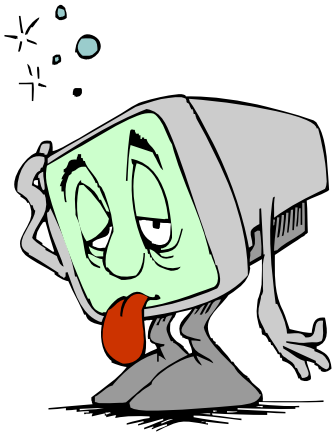


Figure 4-25

IC3

Objective: 3.4.2.4 and 3.4.3.7

Req. File: None

What is a virus?
The average keyboard has thousands of germs on it, but that's not how computers get viruses. A computer virus is a small computer program created by a malicious programmer for the purpose of damaging other computers. When viruses or WORMS become installed on a computer, the computer is infected and the virus or WORM carries out the damage it is programmed to do.

There are many different types of viruses. Most viruses attack computer hard drives by erasing data and damaging system files (the only files that are safe are text files), but programmers can write the virus to do anything they want. If your computer isn't working the way it usually does, you have probably been infected with a virus.

One of the most devastating effects of a virus is that the virus often has the ability to spread from computer to computer. The most malicious viruses—such as the "I Love You" and "Melissa" viruses—have caused billions of dollars in damage worldwide.

How are viruses spread?
The most damaging computer viruses are programmed with the ability to reproduce and infect more computers. Many viruses invade computers through e-mail programs riding the backs of e-mail messages, or through networks and file sharing. Viruses can also be found in storage devices like diskettes, CD-ROMs, or zip disks. The Internet is a host to many viruses as well.

What is an anti-virus program?
The best way to protect your computer from a virus is to purchase a virus-scanning program. A virus-scanning program checks files that you download from the Internet, incoming and outgoing e-mails, and files stored on disks or other storage devices. A virus-scanning program is sort of like your computer's white blood cells; it checks all the files and information that your computer processes and tries to eliminate a virus before it infects your computer. If a virus does infect the computer, the program also tries to erase the virus from the computer. If you're even thinking about connecting to the Internet, you need to have anti-virus software installed on your computer. Using the Internet without protection is a sure way to contract a virus.

Installing a virus-scanning program on your computer:

© 2005 CustomGuide, Inc.

- Protects your computer from becoming infected and from losing valuable information.
- Prevents you from infecting other people and businesses.
- Saves time and resources in recovering from a virus infection.
- Increases computer efficiency.

If your computer is infected with a virus, it's not the end of the world. A virus-scanning program can not only prevent a virus infection, it can also "disinfect" files that contain a virus. When a file is disinfected, the anti-virus program eliminates the virus attacking the file.

What else can I do to prevent a virus?
Good judgement is the first line of defense against a virus. Installing and keeping up-to-date anti-virus software on your computer will keep out most viruses, but you can do a lot to prevent contracting a virus as well. Here are a few guidelines to keep in mind:

- **Don't open messages from unknown senders.** Viruses are often sent through e-mail messages. If you don't know the sender, don't open the message.
- **Don't open attachments from unknown senders.** A virus has to be opened to install itself on your computer. Even if the sender is familiar, think twice before opening the attachment.
- **Keep up to date on the latest virus threats.** Make sure to keep your eyes and ears open for new viruses that are going around. If you know the name of a virus and what to watch for, you have a better chance of eluding an attack.
- **Stay informed regarding changes and advancements in technology.** It is very important to keep yourself informed about the availability of product updates and upgrades. Often times, software companies will issue "patches" or updates for various programs in response to a virus or WORM that may be going around. Reading periodicals, reviewing online publications, or visiting the software company's Web site on a regular basis are all ways to make sure you keep yourself up-to-date on the latest advancements and security measures.

Quick Reference

Computer viruses:

- A virus is a small computer program created by a malicious programmer for the purpose of damaging other computers.
- Most viruses are programmed to reproduce and infect more computers through file sharing, networks, or e-mail messages.
- The best way to prevent a virus infection is to install a virus-scanning program on your computer, so viruses are detected before they attack your computer.
- You are the first line of defense against viruses: don't open messages or attachments that are unrecognizable.

Lesson 4-16: Copyright Concepts

Figure 4-26
Microsoft Word is an example of a copyrighted work.

IC3

Objective: 3.4.3.2

Req. File: None

Figure 4-26

In most countries it is against the law to copy an original work and call it your own. A copyright is a form of theft protection for the author or authors of an original work. Most software is copyright protected. Somebody had to sit down and write the software, just like an author pens a book or an artist molds a sculpture. The following are examples of works that are typically copyright protected:

- Books, magazines and newspapers
- Plays and sporting events
- Music and movies
- Art and architecture
- Software
- Web sites

©

Copyright symbol

In order to receive copyright protection, a work must be available in some recognized medium. In other words, you can't copyright some idea you have in your head. You need to write it down or produce it first.

Once a piece of software is copyright-protected, you cannot distribute it or change it in any way without the permission of the copyright holder, which is usually the author or the company that wrote the software. It is usually OK to copy a piece of software to a CD or disk for your own backup. It is not OK to copy a piece of software to a CD or diskette in order to hand it out to your friends or colleagues. Just because you own a piece of software does not mean that you control its copyright.

Most software companies are pretty serious about copyright law. Here's what Microsoft has to say about Word: "Warning: This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portions of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law."

It is also important to note that Internet users are not granted permission to copy or download just anything off of the Web. Most information on the Internet is governed by laws and other

© 2005 CustomGuide, Inc.

rules which protect information owners and promote the ethical use of data. Some Web pages are copyrighted, so be careful when you choose to use items from someone else's Web site. There is such a thing called "fair use," whereby copyrighted material can be used for specific purposes (such as a student research paper) without the permission of the copyright owner. In most cases, however, it is best to ask the Web administrator, or site creator, for permission before you copy or download anything from a Web page.

If you do choose to use information from the Web, especially in an academic environment, it is absolutely essential that you understand plagiarism, the importance of citing source material accurately, and libel. Plagiarism occurs when one claims another person's writing or work as one's own by not providing proper sourcing. This is a very serious crime and the consequences are severe. Make sure to cite source material accurately, no matter how inconsequential it may seem. Libel is the deliberate communication of incorrect information in a way that causes harm to an individual or organization, and is also a very serious crime.

Finally, don't confuse a copyright with a patent or a trademark. A patent is used to protect a discovery or an invention. A trademark ™ is used to protect a word, slogan or insignia. For more information about copyright law, see the table below.

Table 4-7: Common Misconceptions about Copyright Law

Myth	*Truth*
Only artistic works like books, music and movies are covered under copyright laws.	Wrong. Copyright laws apply to software and Web sites too, no less than it applies to books, music or movies.
Once you buy a piece of copyrighted software, you are free to hand it out to your friends or modify the source code.	Wrong. Doing so would probably violate the copyright law in your country. Most copyright laws prohibit the unauthorized reproduction or distribution of the original copyrighted material. There are a few exceptions in the case of shareware or freeware.
Companies don't really care about copyright violations. The copyright notices are simply a formality.	Wrong. While companies don't pursue every violation, they certainly go after the most brazen scofflaws. If you start selling copies of Word on the Internet, you'd better be ready to defend yourself in court. And be forewarned: Microsoft is a formidable legal opponent.
A copyright is identical to a patent or a trademark.	Wrong. While all three terms relate to intellectual property, they are distinct legal concepts. A patent is used to protect a discovery or an invention. A trademark ™ is used to protect a word, slogan or an insignia.
A company must display a copyright notice in order to be protected under copyright law.	Wrong. Just because you don't see a copyright notice doesn't meant that the work is not copyright protected. In some countries, like the United States, it is not necessary to include a copyright notice—although most companies do anyway. Always assume a piece of commercial software is copyrighted until you learn otherwise.
Only large, multinational corporations can receive copyright protection for their work.	Wrong. In most countries, anyone can receive copyright protection for any original work, including individuals. Consult your government's copyright office for more information about obtaining a copyright.

Quick Reference

Works that are Typically Copyrighted:

- Books
- Movies
- CDs
- DVDs
- Sporting events
- Artwork
- Architecture
- Software
- Web sites
- **Plagiarism** occurs when one claims another person's work as one's own. Make sure to cite source material accurately when using information found on the Web.
- **Libel** is the deliberate communication of incorrect information in a way that causes harm to an individual or organization.
- A **patent** is used to protect a discovery or invention. A **trademark** is used to protect a word, slogan, or insignia.

Lesson 4-17: Understanding Transactions on the Web

Figure 4-27

Most often, you'll use a credit card to pay for online purchases.

Figure 4-28

Learn how to prevent the theft of your personal information!

Figure 4-27

Figure 4-28

IC3

Objective: 3.4.3.4

Req. File: None

You can purchase just about anything online these days. From groceries to grape-flavored lip-gloss, it's all there for the picking. Shopping via the Internet is quick and easy, the product is most often delivered right to your front door, and you can shop at all of your favorite "brick-and-mortar" stores' Web sites too. Also, online services are available 24 hours a day, and oftentimes you will find more products available online than in the actual store!

Too good to be true? Well, there is one huge drawback to shopping online. There is an increased risk of credit card fraud. Because it is nearly impossible to pay with cash and most online retailers won't let you choose a cash-on-delivery option, you are likely to make most, if not all, of your purchases online using a credit card. Thus, there is a lot of personal information floating around out there in cyberspace and hackers are champing at the bit to get a hold of your money. Although the risk of identity theft is ever present, Internet users have some methods of protection.

Digital Certificate

A digital certificate is like an electronic credit card that holds all of your personal information and presents it when you are conducting online business or any other online transaction that requires this type of information. A digital certificate contains the user's name, a serial number, expiration dates, a copy of the holder's public key (that when combined with a private key, can be used to encrypt messages), and a digital signature of the authority that issued the digital certificate.

The *Certification Authority* (CA) issues digital certificates only after verifying the user's information with the *Registration Authority* (RA). If, and only if, ALL of the information is correct, the user will receive their digital certificate.

Encryption

When you encrypt something, you are putting it into a code that only authorized personnel can understand. This prevents unauthorized individuals or networks from accessing confidential or case-sensitive information.

Encryption is used most for things like online credit card sales, so that your credit card information is not read, copied, and abused by a hacker. Other things that might be encrypted include secret missions or operations, or any other sensitive information that you do not want anyone, except the intended receiver, to have access to.

Here is a short list of precautions to consider before making purchases online:

© 2005 CustomGuide, Inc.

- **Only give out credit card information on secure sites:** A secure Web site should require you to enter a username and password in order for you to be able to access your personal account information. A secure Web site is often indicated by a tiny lock icon located in the lower-right corner of the window.
- **Do not share your credit card or account information:** Make sure that you do not inform others of your credit card information, username, or password. Keep this information confidential. Refer to Lesson 4-13: *Working with Passwords and User IDs* for more information on password creation and protection.
- **Check your credit card fraud policy:** Some Web sites are simply a lure set by criminals to steal your money or credit. It can be difficult to know if a Web site is fraudulent however, so be sure that you don't have to pay if you get caught in a scam.
- **Check the company's return policy:** Most companies are lenient when customers want to return a purchase, but you might want to check their policy before making a purchase. Also, if the company is in another country, check the country's consumer rights policies.
- **Check the company's credibility:** If the company is one you have not heard of before, you would do well to research the company's credibility by calling the company's contact numbers, looking for a client list, or checking customer references. Web sites that are familiar and have been in business for a long time, such as amazon.com, already have a solid, respectable reputation established.

Beware that although there are methods available for fighting identity theft and fraud, it can still happen. Know that the site you're shopping on is protected. Sites with protective measures will have their policies clearly stated. Make sure that you are well informed before you start handing out your confidential personal information online.

Quick Reference

Understanding Transactions on the Web:

- Digital Certificate: A digital certificate is like an online credit card that holds all of your information and presents it when you are conducting online business or any other online transaction that requires your personal information.
- Encryption: Prevents unauthorized users from accessing personal or confidential information.

Lesson 4-18: Computers and the Environment

Figure 4-29

Paper is a prime recycling opportunity.

Figure 4-30

It used to be that the disposal of old computers wreaked havoc on the environment, but today many companies embrace "green manufacturing" and proper disposal of chemical waste.

Figure 4-29

Figure 4-30

IC3

Objective: 3.4.3.8

Req. File: None

Quick Reference

The Environment:

- The paper use and hardware manufacturing of computers are affecting the environment.
- You can be a responsible user of computers by recycling products such as paper and printer cartridges, safely disposing of hazardous materials, and providing used equipment to schools or needy organizations

Computers increase productivity but they also consume a lot of energy and materials. The influx of computer use has made many aware of how this new technology is not only changing our lives; it is also making us more aware of the resources we use to make them run.

In order to keep our environment "healthy," we must be responsible computer users and take action to protect the world around us. Recycling is a very positive and popular practice that can reduce a lot of waste. Paper recycling is an especially helpful cause, but other recycling measures are taking hold as well, such as recycling printer toner cartridges (printing quality may decrease when using recycled cartridges, however). Research is being done to find ways to salvage and recycle other computer parts, such as CPUs and monitors or at least parts of them. Another way to recycle is to donate used equipment to schools or needy organizations. Sharing your own personal knowledge and experience can help others in your school, place of employment, or community to learn how to benefit from technology.

In addition, most computer hardware now has features to help reduce the amount of energy used to keep them running. For example, you can set your monitor to turn off if it hasn't been used in a certain amount of time. You can turn it on again when it is ready to be used.

With the Internet and networking technology, the need for paper can be dramatically decreased. In many cases, correspondence and information sharing can be done electronically through e-mail or a network instead of paper. This saves a marked difference in the amount of paper consumed, preserving many more natural resources and the environment.

In the past, the manufacture of computers was a cause for some environmental concern. For example, microelectronic companies have used chlorofluorocarbons (CFCs), which are known to deplete the ozone, to make sure that computer components are free of dust or residue. Chemical rinses and coatings on parts in the computer also affect the environment because storage units for these hazardous chemicals can leak into the ground, contaminating the water wells. These chemicals can also cause problems when units are thrown away.

Fortunately, most companies are embracing "green manufacturing" which means they are mindful of the environment's safety when manufacturing electronics. For example, most companies have found an alternative to CFCs, and there are some organizations whose sole purpose is to dispose of computers safely.

© 2005 CustomGuide, Inc.

Chapter Four Review

Lesson Summary

The E-world

- Common daily economic practices are becoming available electronically, such as shopping, business, and trade. E-mail communication is growing in importance all the time, as well as e-learning, which provides inexpensive training and learning opportunities for people of all ages, income levels, and backgrounds.

People vs. Computers

- There are many differences between artificial and human intelligence, though each has its own niche and purpose in society. For example, computers are good for repetitive tasks, while humans think creatively and intuitively, unlike a computer's calculation.

Computers in Business

- Computers operate "behind the scenes" in many everyday situations.
- Computers have changed a lot about the conduct of business. For example, online banking, airline booking systems, and administration systems are all available and improved with computers.

Computers in Education

- Computers are affecting how teachers and students interact, are making education more available with distance learning and online classes, and students are using them to do homework. Administrative tasks like timetabling and class scheduling are improved as well.

Computers in Healthcare

- Computers in healthcare make diagnosis and treatment much easier for the patient and doctor and electronic files and administrative tasks are also easier using computers.
- Technologies have also been developed to help the physically handicapped to live, work, and communicate.

Computers at Home

- Computers make many home functions easier, such as banking, communication, and entertainment. Some companies even offer the option for teleworking, (working from home) to its employees.

Computers in Industry

- Many tasks in factories and industry-related jobs have been made safer and more human-friendly because of computers. For example, computers and robots, not humans, do most of the manufacturing work in automobile plants.

Computers in Government

- Governments are using computers to help store records, collect taxes, and some are even trying to make voting available electronically.

Ergonomics

- Practice good ergonomics when using the computer to prevent injury and enhance productivity.

Computer-related Injuries

- Computers are meant to increase productivity, but not at the expense of health. Common injuries sustained from prolonged computer use are repetitive strain injury, eye strain, and back problems.

Maintaining a Safe Working Environment

- In addition to practicing good ergonomics, prevent broken equipment or bodily injury by keeping your workspace and walking areas clear and distributing electrical plug-ins wisely.

Information Security

- In short, information security is taking measures to protect your computers and network systems from tampering by hackers or viruses.
- One of the most important steps an organization can take is to adopt an enforced information security policy.
- Some organizations may restrict access to certain data in order to protect secure or important information.
- It is important that individual users are aware of security risks and how to handle them.

Working with Passwords and User IDs

- User ID: A user ID uniquely identifies the user on a network.
- Password: A password grants a user access to their individual account.
- It is important for organizations to adopt a password policy because passwords are a main line of defense against attackers.

Backing up Data and Preventing Theft

- Backing up Data: Backing up data and software makes recovering from a security breach or a natural disaster much easier. Network administrators usually back up a network's data from a centralized location, but individual users should also back up their own data on a regular basis.
- Preventing Theft: Always report the theft of a computer, PDA, or mobile phone immediately. It is a good idea to create a startup password for your electronic device, but an even better idea to password protect any sensitive files that are contained on the device.

Computer Viruses

- A virus is a small computer program created by a malicious programmer for the purpose of damaging other computers.
- Most viruses are programmed to reproduce and infect more computers through file sharing, networks, or e-mail messages.

© 2005 CustomGuide, Inc.

- The best way to prevent a virus infection is to install a virus-scanning program on your computer, so viruses are detected before they attack your computer.
- Good judgement is the first line of defense against viruses: don't open messages or attachments that are unrecognizable, keep up to date on the latest virus threats, and make sure to stay informed regarding changes and advancements in technology.

Copyright Concepts

- Books, movies, CDs, DVDs, sporting events, artwork, architecture, software, and Web sites are all examples of works that are typically copyrighted.
- Plagiarism occurs when one claims another person's work as one's own. Make sure to cite source material accurately when using information found on the Web.
- Libel is the deliberate communication of incorrect information in a way that causes harm to an individual or organization.
- A patent is used to protect a discovery or invention. A trademark is used to protect a word, slogan, or insignia.

Understanding Transactions on the Web

- Digital Certificate: A digital certificate is like an online credit card that holds all of your information and presents it when you are conducting online business or any other online transaction that requires your personal information.
- Encryption: When you encrypt something, you are putting it into a code that only authorized people can understand. This prevents unauthorized users from accessing personal or confidential information.

Computers and the Environment

- The paper use and hardware manufacturing of computers are affecting the environment.
- You can be a responsible user of computers by recycling products such as paper and printer cartridges, safely disposing of hardware containing hazardous materials, and providing used equipment to schools or needy organizations.

Quiz

1. Computers and the Internet are used to: (Select all that apply.)

A. Organize information
B. Increase productivity
C. Collect Information
D. All of the above.

2. Computers operate "behind the scenes" in many everyday situations. (True or False?)

3. Businesses only use computers for their calculation skills. (True or False?)

4. Computers are changing the health care industry with: (Select all that apply.)

A. LASIK eye surgery
B. Voice recognition software for the blind
C. Free health insurance
D. Electronically-stored patient files

5. Humans do most of the work in industrial factories. (True or False?)

6. What should you do to practice good ergonomics? (Select all that apply.)

A. Take frequent breaks.
B. Use an eye-friendly monitor.
C. Sit at a height appropriate for your wrists and arms while typing.
D. All of the above.

7. RSI stands for:

A. Repetitive Strain Injury
B. Recreational Strain Injury
C. Renewable Source Industry
D. Retroactive Search Investigation

8. You are complying with legal health and safety rules if computer cords and cables are lying all over your workspace. (True or False?)

9. Which of the following is not a true statement about passwords?

A. They are known only by an individual user.
B. They grant access to an individual account.
C. You should use your social security number as your password.
D. They are generally 4-16 characters long.

10. It is not important to back up your own data on a regular basis because your network administrator will do it for you. (True or False?)

11. All of the following are advantages of installing a virus-scanning program on your computer, except:

A. Prevents the loss of valuable information.
B. Saves time and resources in recovering from a virus infection.
C. Prevents you from getting sick.
D. Increases computer efficiency.

12. Make sure to stay up to date on the latest virus threats. (True or False?)

13. Which of the following are examples of works that are typically copyrighted? (Select all that apply.)

A. Books
B. Software
C. Web sites
D. DVDs

© 2005 CustomGuide, Inc.

14. Plagiarism is the deliberate communication of incorrect information in a way that causes harm to an individual or organization. (True or False?)

15. Which of the following is NOT a precaution to consider before making purchases online?

A. Only give out credit card information on secure sites.
B. Use someone else's credit card instead of your own.
C. Do not share your credit card account information.
D. Check the company's credibility.

16. You can be a responsible user of computers by: (Select all that apply.)

A. Safely disposing of hazardous materials.
B. Not supporting "green manufacturing."
C. Providing used equipment to schools or needy organizations.
D. Recycling products such as paper and printer cartridges.

Quiz Answers

1. D. Computers and the Internet are used to do all of the above.

2. True. Computers operate "behind the scenes" in many everyday situations.

3. False. Businesses use computers for many other tasks, such as airline booking, insurance claims, and administration systems.

4. A, B and D. Unfortunately, computers are not able to provide free health insurance.

5. False. Computers or robots do most of the work in industrial factories.

6. D. All of these things are required for good ergonomics.

7. A. A Repetitive Strain Injury (RSI) is sustained when the same muscles are used over an extended period of time.

8. False. Computer cords and cables are safety hazards.

9. C. You should never use information for your password that could be easily guessed by someone that knows you well.

10. False. Although most network administrators do back up the network on a regular basis, it is still essential that each individual user back up their own personal data.

11. C. A virus-scanning program protects your computer from getting sick, not you!

12. True. Keeping up to date on the latest virus threats could end up saving you from a virus attack.

13. A, B, C, and D. All of these are examples of works that are typically copyrighted.

14. False. Plagiarism occurs when one claims another person's work as one's own. *Libel* is the deliberate communication of incorrect information in a way that causes harm to an individual or organization.

15. B. Using someone else's credit card without their prior consent is considered credit card fraud and is absolutely illegal.

16. A, C, and D. You can also be a responsible user of computers by supporting "green manufacturing," which means you are mindful of the environment's safety in the manufacturing of electronics.

Index

A

adding
  Address Book entries 62
Address Bar, Internet Explorer 99
Address Book
  adding entries 62
  distribution lists 66
  updating 64
advanced search 120
AltaVisa 119
archiving
  information manually 60
attaching
  files to an e-mail 44
attachments
  adding to an e-mail 44
  opening 46
  saving to disk 46

B

back up data 151
backup
  archiving information manually 60
broadband modem 16

C

cable Internet connection 97
cable modem 16
client/server network 10
computer-related health issues
  back problems 146
  eye strain 146
  RSI 146
computers at home
  banking 141
  communication 141
  entertainment 141
  Internet 141
  telecommuting 141
computers in business
  accounting 136
  advertising 136
  banking 136
  group work 137
  insurance 137
  management 136
  office automation 137
  project management 137
  stock exchange 136
  transportation 137
computers in education
  advantages ..... *See*
  CBT 138
  class scheduling 138
  disadvantages ..... *See*
  online classes 138
  timetabling 138
computers in government
  public records 143
  revenue collection 143
  voting 143
computers in healthcare 140
computers in industry
  advantages of 142
  disadvantages of 142
copying
  folders 52
  images 110
  multiple items 54
  text 110
  URLs 110
copyright
  common misconceptions 155
creating
  Address Book entries 62
  distribution lists 66
cutting
  images 110

text 110
URLs....110

D

Delete History button.... 103
deleting
distribution lists.... 68
e-mails.... 55
delimited text files
exporting.... 58
delivery options, e-mail 34
digital certificate 156
digital modem 16
distribution lists
creating 66
deleting 68
domain name.... 30
downloading
images....114
music....114
patches, fixes, and drivers....114
programs 114
text 114
videos....114
viruses....115
DSL Internet connection 97
DSL modem.... 16

E

e-commerce.... 132
e-mail
advantages.... 74
Blind Carbon Copy 32
carbon copy.... 33
composing.... 32
distribution lists, using.... 66
finding.... 41
format, changing 72
forwarding.... 40
opening the Inbox 36
options, specifying.... 34
Out of Office Assistant.... 71
reading 36
receiving 36
replying to.... 38
Send and Receive button.... 33
sending.... 32
using.... 74
e-mail address
domain names 30
Top Level Domain (TLD).... 30
understanding.... 30
user name.... 30
encryption 156
environmental concerns....158
ergonomics
breaks....144
environment....145
feet 145
keyboard 145
lighting....145
monitor....145
mouse....145
posture 144
seating....145
e-world....132
Excite....119
exporting
external files....58
Extranet....14

F

favorites
creating folders 106
deleting 107
organizing 106
Favorites Web pages 104
files
archive, saving to....60
attaching to an e-mail....44
exporting....58
finding
e-mail messages....41
information on the Web 118
firewall....14
flagging items 57
folder
description of 50
Folder List
using....52
formatting
e-mail message format....72
forwarding 40

H

History button....102
history of viewed Web pages 102
home page....97
changing....116
definition of 116
Hotbot....119
HTML, message format....72
hub, network 10
hyperlinks
using....100

I

images

© 2005 CustomGuide, Inc.

showing and hiding 117
importance level, e-mail 35
Inbox
change status of 56
opening 36
sorting messages 42
information security 148
inserting
files in an e-mail 44
Internet
connecting to 96
introduction to 18
Internet Connection Wizard 97
Internet Service Provider 96
Intranet 14
ISDN Internet connection 97
ISDN modem 16
ISP ..... *See* Internet Service Provider

L

LAN 11
Lycos 119

M

memory
cache 89
Microsoft Word, message format 72
modem 16
moving
multiple items 54
moving, folders 52

N

netiquette 75
network etiquette 75
networks 10
client/server network 10
peer-to-peer network 10
phone lines 16

O

online shopping 156
opening
attachments 46
Out of Office Assistant 71

P

password 150
creating 94
definition of 94
pasting
images 110
text 110
URLs 110
peer-to-peer network 10
Personal Folder Files
saving to 60
plain text, message format 72
prevent theft 151
print
changing printers 113
number of copies 113
output options 112
print preview 112
print preview 112

R

recycling 158
refresh a Web page 101
renaming, folders 52
replying
to e-mail messages 38
rich text, message format 72

S

safety precautions 147
saving
attachments 46
to an archive file 60
Web pages 108
search
Web 118
search engine
advanced search 120
secure Web sites
definition of 94
password 94
user name 94
security
firewall 89
security, e-mail 35
selecting, multiple items 54
sensitivity, e-mail 35
Spam
preventing 76
understanding 76
stop transfer of Web pages 101

T

tasks
for computers 134
for people 134
teleworking
advantages 141
disadvantages 141

text files
exporting 58
TLD..... 30
Top Level Domain 30

U
unsolicited e-mail..... 76
user ID 150
user name 30

V
viruses 46
anti-virus programs 152
preventing 77, 153
spreading.....77, 152
understanding.....77, 152

W
WAN 11
Web 18
Favorites 104
history of viewed Web pages 102
home page 97
search 118
Web address 98
Web addresses
domain name..... 92
extension 92
protocol 92
Resource 92
understanding.....92
URL 92
Web browser 96
commonly used.....90
understanding.....90
Web pages
saving.....108
Web server 18
Web, moving to a specific Web page 98
World Wide Web.....18
advanced search 120
cookie.....89
copying from.....110
cutting from 110
FTP 89
HTTP 88
hyperlink.....88
ISP 89
key terms.....88
navigating 100
pasting from 110
URL 88

Y
Yahoo 119

© 2005 CustomGuide, Inc.