# Lesson 7: Business E-Mail and Personal Information Management

## Objectives

By the end of this lesson, you will be able to:

- $\cancel{P}$  1.5.14: Explain the function of a CAPTCHA when requesting services from the Web.
- A 1.6.1: Configure an e-mail client to send and receive e-mail, including SMTP, POP3, IMAP, Web-based e-mail support.
- $\cancel{P}$  1.6.2: Distinguish between MIME, S/MIME and PGP/GPG.
- ☆ 1.6.3: Configure an appropriate e-mail signature and identify its usefulness in a business setting.
- $rac{P}{P}$  1.6.4: Identify the usefulness of an e-mail thread, and when it is appropriate.
- $rac{P}{P}$  1.6.5: Identify spam and take steps to manage it, including creation of client-side filters and SMTP authentication.
- $\cancel{P}$  1.6.6: Define blind copying (BCC).
- $\cancel{P}$  1.6.7: Distinguish e-mail forwarding from replying.

- ☆ 1.6.10: Identify common e-mail issues in the workplace, including harassment, when to use e-mail, e-mail message storage.
- ☆ 1.6.11: Use "Out of Office" messages for e-mail automatic reply (i.e., autoresponder) services.
- $\cancel{P}$  1.6.12: Attach files to e-mail messages.
- $\cancel{P}$  1.6.13: Use e-mail to share files and documents within and across organizations.

- $\cancel{P}$  1.6.14: Identify concerns for Web-based and IMAP-based e-mail.
- ho 1.6.15: Identify situations in business environments when e-mail is more appropriate than texting for communicating, and vice-versa.
- $\cancel{P}$  1.7.6: Identify privacy concerns related to network communications (e.g., e-mail, instant messaging, P2P).
- $\cancel{P}~~$  1.12.1: Identify ways that calendar and scheduling software helps organize IT-based activities.
- $\cancel{P}$  1.12.2: Identify Personal Information Management (PIM) productivity applications, including tools for PCs and smartphones.

- 1. What feature provided with many e-mail programs can store information for commonly accessed e-mail contacts?
  - a. Import tool
  - b. Address book
  - c. Autoresponder
  - d. Attachment
- 2. What is an e-mail signature?
  - a. A digital display of one's handwritten signature
  - b. Proof of one's identity for security purposes
  - c. A closing remark that is manually attached to an e-mail message
  - d. Text that appears automatically at the bottom of an e-mail message
- 3. Name the protocol used to send e-mail over the Internet, and name one of two protocols that can be used to receive e-mail over the Internet.

## Introduction to Business Electronic Mail (E-Mail)

commonplace use of electronic mail has given rise to the term **snail mail**, which is a

slang term for the standard postal service. E-mail allows businesses to communicate

Electronic mail, or e-mail, is widely embraced for business communication. The

snail mail Slang term for the standard postal service.



## CIW Online Resources – Movie Clips

quickly and efficiently with customers and employees.

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Lesson 7: Business E-Mail and Personal Information Management

## E-mail is not dead

With the advent of texting, many mobile phone users have questioned the usefulness of e-mail. However, e-mail is still the *de facto* standard communication tool for business. The benefits of using e-mail include the ability to include attachments; the ability write lengthy messages; and having a paper trail, or e-mail thread, of your communications. The ability to easily store and organize e-mail is another major benefit. Messages can quickly be searched, accessed and archived. This is particularly important if you need to find a message from a customer from several years past, for example. Texting is often used between employees for sending quick messages and alerts. For instance, if an employee is meeting with a customer, the parties may text one another about their current location or if they are running late. However, you would not send a business contract using a text message. Texting can be an alternative to e-mail in business, but it is not a replacement.

## **How E-Mail Works**

Whether your e-mail system is configured for you at work or you set up your own system at home with a modem and an e-mail program, the basic function of e-mail is simple: You use it to send electronic messages from one computer to another.

For messages to be sent from one computer to another, the computers must be linked, or networked. You may have a physical connection (such as a cable) between the two computer stations, or the computers may each connect to a local server that relays the messages, or the computers may use the Internet to relay messages.

Even if you use a Web-based e-mail service such as Gmail, Outlook.com (formerly Hotmail) or Yahoo! Mail (instead of a desktop-based client), the e-mail message is sent from one computer to another. For example, a Gmail server sends an e-mail to an Outlook.com server. The user then downloads the message to his or her PC or mobile device.



In 2013, Hotmail users were automatically migrated to Outlook.com.Users' Hotmail e-mail addresses, passwords, e-mails and contacts will remain unchanged.

## Networks and addresses

As you learned previously in this course, Internet communication is made possible by TCP/IP software. Remember that TCP enables two computers to establish a communication link and exchange packets of data, while IP configures the format and

OBJECTIVE 1.6.15: E-mail vs.

textina

NOTE:

Do you think e-mail

has improved the way you communicate with

others? What are the benefits and drawbacks of

e-mail. Do you think e-mail can be

In most corporate environments, IT

personnel handle

the setup of all communications

equipment and software.

replaced by

texting?

NOTE:

Hotmail was discontinued by

migrated to Outlook.com.

Microsoft in 2013,

and all users were

addressing scheme of the packets. TCP/IP software sends information to the computer with which you are connected, which then passes it on to other computers until it reaches the destination.

Every device on the Internet has a unique **IP address**, just as every house and business has a street address. An IP address is a series of numbers divided into four sections, each separated by a period, or dot. IP addresses are also called "dotted quads."

Local area networks (LANs) and wide area networks (WANs) use IP addresses to identify each user on the network, whether or not the network has access to the Internet. When you log on to the company network, you enter a user name that the network associates with your IP address. Some companies devise their own internal IP address scheme and never connect to the Internet. These companies use TCP/IP across leased lines and establish an internal network.

E-mail is available to anyone who has an IP address either on an internal network or on the Internet. When you use e-mail at work, your IT department assigns you an IP address and user name by which the company network recognizes you. Usually when you log on to a company network, you must also enter a password. IT departments generally assign a generic password to a new account, which you can later change. When you purchase Internet service through an ISP or a commercial online service, your provider assigns an IP address to you. Your provider uses that IP address to recognize you, and you can send and receive e-mail using that address.

When you are logged on to the network or connected to the Internet, you can create an electronic message using an e-mail program, and send your message across the network (or the Internet) using a specific address for your intended recipient. The network delivers your message, and your recipient receives and reads your message using an e-mail program.

## **E-mail protocols**

As you learned earlier in this course, e-mail involves two mail servers: outgoing and incoming. You can use separate servers for outgoing and incoming e-mail, or a single server for both tasks. The outgoing and incoming servers use various protocols to send, receive and store e-mail messages.

### Outgoing mail protocol: Simple Mail Transfer Protocol (SMTP)

You send e-mail to others with an outgoing server using Simple Mail Transfer Protocol (SMTP). SMTP is the Internet standard protocol for transferring e-mail messages from one computer to another. It specifies how two e-mail systems interact. SMTP is responsible solely for sending e-mail messages, and is part of the TCP/IP suite.

### MTAs and MDAs

An outgoing mail server runs a **Message Transfer Agent (MTA)**, also called a mail transport agent, which routes, delivers and receives messages, usually via SMTP. A **Mail Delivery Agent (MDA)** receives the messages delivered by the MTA and then delivers each message to its proper destination (or mailbox), where a user can pick it up.

### Incoming mail protocols: POP3 and IMAP

As you have learned, you receive e-mail from an incoming mail server using Post Office Protocol version 3 (POP3) or Internet Message Access Protocol (IMAP). POP3 and IMAP are used to store and access e-mail messages.

## NOTE:

**IP** address

A unique numerical

address assigned to

a computer or device on a network

You can also create messages offline and send them later.

#### Message Transfer

Agent (MTA) A messaging component that routes, delivers and receives e-mail.

#### Mail Delivery Agent (MDA)

An e-mail server program that receives sent messages and delivers them to their proper destination mailbox.

## Post Office Protocol version 3 (POP3)

POP3 servers receive and hold incoming e-mail messages in the appropriate mailbox on the server until users log on (authenticate themselves with a user name and password) and download their mail. Once messages are downloaded, they are removed from the server. Because messages are downloaded immediately, you do not need a constant connection with the server in order to work with your e-mail, which is beneficial for people who have dial-up connections. POP3 is also referred to as a "store-and-forward" service.

## Internet Message Access Protocol (IMAP)

An IMAP server receives and holds your messages. When you log on with your user name and password, you can read a message on the server, or you can view just the heading and the sender of the message and decide whether to download it. Messages are not downloaded automatically as they are with a POP3 server. E-mail clients, including Mozilla Thunderbird and Microsoft Windows Live Mail, support IMAP and allow you to specify multiple IMAP accounts.

Using IMAP, you can create and manipulate mailboxes or folders directly on the server, and the messages remain on the server until you delete them. IMAP can be thought of as a remote file server. If you are working remotely, you must have a constant connection with the server, and IMAP is more widely used by people who maintain a constant connection, for example through a wireless carrier, DSL, a mobile hotspot or cable. Users who want to work with their e-mail files locally must download their messages.

## E-mail addresses

To send and receive messages, you need an e-mail address. E-mail addresses use the following format:

#### username@domain

All e-mail addresses contain the @ symbol between the **user name** and the domain. The @ symbol means "at." The following is a typical e-mail address format:

#### student1@class.com

The part of the address before the @ identifies the user within a domain. The user name is also known as an e-mail account. When you purchase Internet service or when you join a company that has e-mail, you choose (or you are assigned) a user name. Because the rules for creating user names are flexible, conventions vary. Typically, the user name is related to the person's name or job function, as shown in the following examples, and may also include periods, underscores or numbers in addition to letters,:

accounting@company.net jsmith@company.net johns@company.net john.smith@company.net

The part of the address after the @ is the domain name of the organization or company that issues the e-mail account. (As you learned earlier in this course, a domain name is an IP address represented in words.) The domain name portion of your e-mail address identifies your location on the Internet (or on the company network) so that you can receive mail.

#### user name

A unique name or number that identifies you when logging on to a computer system or online service. In an e-mail address, the part before the @ symbol. Your e-mail address, like your home address, is unique; no one else can have the same address within the same domain. For example, different individuals can have the addresses johndoe@fed.gov, johndoe@fed.com and johndoe@fed.mil because the user name is not duplicated within the same domain. This arrangement is similar to having a 1234 Main Street in various U.S. cities.

## E-mail services and programs

Many types of e-mail services are available. You can use an **e-mail client** to send messages over the Internet if you have an account with an ISP. Mozilla Thunderbird is a popular e-mail program on the Internet because it can run on multiple platforms, such as Apple OS X, Linux and Windows. E-mail clients are for e-mail purposes only; however, they are sometimes integrated within a Web browser (Opera Mail is an example of this configuration). An e-mail client is also referred to as a **Mail User Agent (MUA)**.

## Free e-mail applications

You can also use **browser e-mail** programs. E-mail applications such as Mozilla Thunderbird, Windows Live Mail and Opera Mail have been available for years. These applications lack sophisticated features found in applications such as Microsoft Outlook, but are appropriate for many individuals and small businesses.

### Web-based e-mail

You can also use **Web-based e-mail** services. Several such services are available, including Google Gmail, Yahoo! Mail and Outlook.com (formerly Hotmail). Web-based e-mail is free, offers e-mail accounts that are accessible from any computer with Internet access, and permits family members who share a single Internet account to have separate e-mail addresses. However, you must have Internet access through a service provider before you can use Web-based e-mail, or you can use a public computer that offers Internet access, such as a computer at a public library.

Web-based MUAs store e-mail messages on their cloud servers, and users access their e-mail through a Web page. You can also use an e-mail client to download mail from a Web-based account.

When you create a Web-based e-mail account, you request a user name (e-mail address), and the hosting service will accept or deny your request depending upon whether that name is already in use within that domain. You created a Google account and a Microsoft account earlier in this course. Both accounts provide free e-mail services.



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Exercise 7-1: Mail user agents

## E-mail over the Internet

Because your e-mail address is unique within a domain, and because your user name and domain constitute a unique address on the Internet, anyone who knows your address can send you e-mail. The computers to which you connect on the Internet use TCP/IP to deliver your messages to your specific address.

#### e-mail client

An e-mail program that is independent of any specific Web browser, and that you can use to send e-mail messages.

#### Mail User Agent (MUA)

A messaging component used as a stand-alone application by the user.

#### browser e-mail

E-mail programs such as Outlook Express and Opera Mail that come bundled with a Web browser and with which they may be integrated.

#### Web-based e-mail

Free e-mail service from a provider such as Google Gmail or Yahoo! Mail in which you request a user name. You can access your e-mail from any computer that has access to the Internet.

#### Gateways

The people sending you messages need not be in the same domain, nor does it matter which e-mail programs they use. Your unique Internet address ensures that the message will be delivered to you. Gateways between e-mail systems allow users on different e-mail systems to exchange messages. A gateway is a computer that connects two networks that have different protocols.

Gateways enable you to send and receive e-mail between all Internet mail services over the Internet because they enable different networks to communicate. For example, if you have an account with Google, you can send an e-mail message to your brother in another state, who has an account at his university. He in turn can forward your message to your cousin in another country, who has an account with her employer.

#### E-mail on a network

E-mail works on a network much as it does over the Internet. Each user has a specific IP address within the company's domain, and messages are routed from one user to another via the network server, which uses TCP/IP to transfer messages to specific IP addresses.

However, LANs may use proprietary protocols to send messages to people within the LAN, and use SMTP to send e-mail to recipients outside the LAN, such as remote employees or business associates.

Some networks may be self-contained; they will use only proprietary protocols to send messages to people within the LAN. You may be unable to connect to the global Internet from within your company's network. In such cases, you can send and receive messages to and from your co-workers, but you cannot exchange messages with anyone outside the network.

## MIME, S/MIME, PGP and GPG

MIME controls the way that messages and attachments are organized and distinguished from one another, whereas S/MIME controls the way that encryption information and digital certificates can be included as part of an e-mail message. Most browsers support S/MIME. PGP and GPG are alternatives to S/MIME.

## Multipurpose Internet Mail Extensions (MIME)

**Multipurpose Internet Mail Extensions (MIME)** is a protocol that was developed as an extension of SMTP. MIME allows users to exchange various types of data files over the Internet, such as audio, video, images, applications and so forth.

MIME is a system that identifies attached files by type. MIME types are classified under broad headings (text, image, applications, audio and video) and then subclassified by specific type. For example, a QuickTime video is identified as a video/quicktime MIME type.

Servers insert a MIME definition inside the HTTP **header** at the beginning of any Web transmission so that your browser (or e-mail client or any other Internet client) can select the appropriate player (whether built-in or plug-in) for the type of data indicated in the header.

Modern e-mail clients support MIME, allowing users to receive various types of files as attachments to e-mail messages. When a user opens the attachment, the appropriate application (as specified by the attachment's MIME type) is opened and the attachment can be viewed, heard or otherwise experienced, assuming that the client computer has the appropriate application installed.

#### **OBJECTIVE** 1.6.2: MIME, S/MIME and PGP/GPG

#### Multipurpose Internet Mail Extensions (MIME)

A protocol that enables operating systems to map file name extensions to corresponding applications. Also used by applications to automatically process files downloaded from the Internet.

#### header

A block of information attached to a piece of data. The first part of a network packet. Can contain network addressing information or additional information that helps computers and applications process data.

#### Secure MIME (S/MIME)

Secure version of MIME that adds encryption to MIME data.

#### Pretty Good Privacy (PGP)

A method of encrypting and decrypting e-mail messages. It can also be used to encrypt a digital signature.

#### GNU Privacy Guard (GPG)

An open-source version of PGP, used for encrypting and decrypting e-mail messages, that does not use patented algorithms.

## Secure MIME (S/MIME)

**Secure MIME (S/MIME)** is a version of the MIME protocol that provides a secure method of sending e-mail. S/MIME supports encryption and the use of digital certificates in e-mail. (Encryption will be discussed in detail in a later lesson.)

## Pretty Good Privacy (PGP)

An alternative to S/MIME is **Pretty Good Privacy (PGP)**, a method developed by Philip Zimmerman for encrypting and decrypting e-mail messages. PGP is available in a free version defined by the IETF's OpenPGP specification, which uses non-patented encryption algorithms. The commercial version, owned by Symantec Corporation, uses various encryption algorithms, depending on the task.

PGP uses the public-key encryption system. Each user has a publicly known encryption key, which is used to encrypt messages, and a private key (known only to that user), which is used to decrypt messages. When you encrypt a message intended for your recipient, you encrypt it using his or her public key. When the recipient receives the message, he or she decrypts it with his or her private key.

To use PGP, you download (or purchase) it and install it on your computer. Then you register the public key that your PGP program gives you with a PGP public-key server. This process enables people with whom you exchange messages to find your public key and use it for encrypting messages they send you.

PGP runs on most operating systems. You can access the latest free, open-source version from the PGP Alliance's Web site at *www.openpgp.org*.



After Philip Zimmerman put PGP in the public domain, the U.S. government brought a lawsuit against him because he made an effective encryption tool available to anyone (including potential enemies of the United States). The lawsuit was eventually dropped, but it is illegal to use PGP in seven countries and with certain individuals.

## GNU Privacy Guard (GPG)

**GNU Privacy Guard (GPG)**, also known as GnuPG, is an open-source implementation of OpenPGP that does not use patented algorithms. It is free and can be used, modified and distributed under the terms of the GNU General Public License (GPL). The GNU GPL guarantees a developer's freedom to share and change free software, and to ensure the software is free for all users. GnuPG is available for Linux/UNIX, as well as for OS X and Windows operating systems. Visit *www.gnupg.org/download/* to download GnuPG.

PGP and GnuPG encrypt the e-mail message and its attachments. However, neither encrypts the authentication session (that is, your user name and password for signing on and receiving and sending mail) or the e-mail's Subject field. When you use these encryption tools, you should not include sensitive information in the Subject field.



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Exercise 7-2: E-mail encryption

#### **OBJECTIVE** 1.6.1 E-mail clients

#### NOTE:

Most ISPs provide support via telephone to help users set up e-mail clients at home. In a business setting, IT staff members usually set up e-mail clients.

## **E-Mail Configuration Requirements**

Before a user can send and receive e-mail, an e-mail client must be installed and configured. To configure an e-mail client, you must identify yourself and provide the names of the mail servers used by your ISP. Most e-mail clients allow you to set up and configure multiple accounts.

## **Configuring Windows Live Mail**

Windows Live Mail is an e-mail program designed for Windows 7. It can be downloaded as part of the Windows Essentials application suite.



Be sure that you do not confuse the Windows Live Mail service with the Webbased service Hotmail, formerly known as Windows Live Hotmail, which was replaced by Outlook.com.

Windows Live Mail requires the same configuration information as most e-mail clients: the e-mail address, the name of the outgoing (SMTP) mail server, the name of the incoming (POP3) mail server, a POP3 account name and a POP3 account password.



You can also specify an IMAP or HTTP server as the incoming mail server. HTTP servers are used for Web-based e-mail accounts.

You use the General and Server tabs of the Properties dialog box to specify these settings in Windows Live Mail. Use the General tab of the Properties dialog box (Figure 7-1) in Windows Live Mail to specify your user name and e-mail address.

General Server	dent100) Properties	
servers Hotmail		
Outlook (ciw.stu	udent 100)	
User Information -		
<u>N</u> ame:	Rosa Hemandez	
Organization:		
E-mail address:	ciw.student100@outlook.com	
Reply address:		
Reply address:		
	OK Cancel Apply	

Figure 7-1: Configuring Windows Live Mail to manage Outlook.com account

#### NOTE:

POP3 does not encrypt transmissions by default. What is your opinion about the risk of an unauthorized person obtaining your user name and password while you log on to a POP3 server? When you log on to your e-mail account, your user name and password are sent to the POP server for authentication. You can download your messages only after you have supplied a valid user name and password.

You use the Server tab of the Properties dialog box (Figure 7-2) in Windows Live Mail to specify the names of your Outlook.com account's incoming and outgoing mail server(s). Outlook.com directs mail to an HTTP server for mail services, as do many other Webbased e-mail accounts. You also use this tab to specify your account name and password.

ち Outlook (ciw.s	tudent100) Properties
General Server	Security
Server Information	on
My mail serve	r is an HTTP server.
Server URL:	https://mail.services.live.com/DeltaSync_v2.0.0/!
Mail Server	
Login name:	ciw.student100@outlook.com
	For example: someone@microsoft.com
Password:	
_	Remember password
	OK Cancel Apply

Figure 7-2: Windows Live Mail Properties dialog box — Server tab

If you were specifying an incoming and outgoing mail server, the Outgoing Mail Server section of the Properties dialog box would contain an option that reads My Server Requires Authentication. This option is available in most e-mail clients. Some system administrators configure their SMTP servers to require a user name and password in order to send e-mail as well as to receive it. When you select this option, you enable your e-mail client to send your user information each time you send an e-mail message.

**OBJECTIVE** 1.6.5: Spam and filters System administrators may require authentication before sending mail in an effort to curtail the illicit use of their SMTP servers for sending unsolicited junk mail, or spam (which will be discussed later in this lesson). One of the drawbacks of requiring SMTP authentication is that the transmission of the user name and password are not encrypted by default, therefore the requirement increases the chances that a hacker can use a packet sniffer (software that monitors network activity) to obtain a valid user name and password.

## **Configuring Mozilla Thunderbird**

In addition to its Firefox Web browser, Mozilla offers an integrated e-mail program called Thunderbird. To specify e-mail configuration settings in Thunderbird, you use the Account Wizard. Figure 7-3 shows the Identity screen of the Account Wizard, which you use to specify your name and e-mail address.

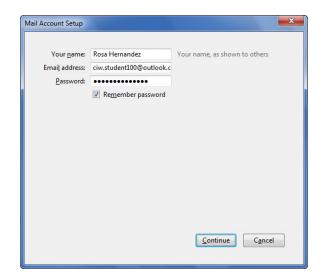


Figure 7-3: Thunderbird Account Wizard — Mail Account Setup screen

Figure 7-4 shows the e-mail server names in the Mail Account Setup screen. You use this screen to identify the address of your POP3 (incoming) server and your SMTP (outgoing) server.

Your <u>n</u> ame: Emai <u>l</u> address:		ernandez Jent100@outlook.c	Your name, as sl	nown to c	ther	s			
Password:	•••••	•••••							
	Re <u>m</u>	ember password							
		4 10 100 1 1 1							
Configuration	round in i	Mozilla ISP database							
		Server hostname	e	Port		SSL		Authentication	
Incoming:	POP3 🔻	Server hostname	e	Port 995	•	SSL SSL/TLS	•	Authentication Normal password	
Incoming: I Outgoing: S		r	e •		•				
		pop3.live.com	•	995		SSL/TLS	•	Normal password	•
Outgoing: S		pop3.live.com smtp.live.com	•	995		SSL/TLS	•	Normal password	

Figure 7-4: Thunderbird Mail Account Setup screen with mail server configurations

Remember that service patches and updates for e-mail clients become available periodically. Check the vendor sites frequently for updates. Consider that some functions for e-mail messages, such as printing, may be configured outside the client.



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Exercise 7-3: E-mail configuration requirements

In the following lab, you will configure Mozilla Thunderbird as an e-mail client. Suppose the personnel manager of your company requests a laptop with Thunderbird set up as the e-mail client. You can configure Thunderbird to access the corporate e-mail servers so that the manager can use the laptop to access her company e-mail.



## Lab 7-1: Configuring Thunderbird as your e-mail client

In this lab, you will configure Mozilla Thunderbird as your e-mail client.

 First, you will install Thunderbird. Open Windows Explorer and navigate to the C:\CIW\Internet\Lab Files\Lesson07 folder. Double-click Thunderbird Setup 12.0.1.exe, then click Run. If the User Account Control window appears, click Yes to allow Thunderbird to install. The Mozilla Thunderbird Setup Wizard will appear, as shown in Figure 7-5.



Figure 7-5: Setting up Mozilla Thunderbird as your e-mail client

- 2. Click **Next** to display the Setup Type screen. Ensure that **Standard** is selected and click **Next**. If the License Agreement appears, accept the agreement.
- **3.** In the Summary screen, click **Install**. Click **Finish** when the installation is complete. Thunderbird should open by default. If it does not, double-click the **Mozilla Thunderbird** Desktop icon.
- **4.** Next, you will configure Thunderbird as your e-mail client. Notice that Thunderbird opens automatically and displays the Import Wizard. Select **Don't Import Anything**, then click **Next** to display the Account Wizard.
- **5.** Ensure that the **Mail Account Setup** window is selected. Recall your Microsoft account e-mail address you created earlier in this course. (If you do not have a Microsoft account, go to *https://signup.live.com* and create one.)
- 6. Type your name, press TAB, then type your e-mail address, such as *ciw.yourname@outlook.com*. Press TAB, then enter the password for your account.
- **7.** Click the **Continue** button. You should see a message stating "Configuration found in Mozilla ISP database." If not, ensure your Outlook.com configurations are correct.
- **8.** Notice the incoming and outgoing mail server information, as shown in Figure 7-6. The POP3 and SMTP servers for Outlook.com are listed.

Your <u>n</u> ame:	Rosa Hernandez	Your name, as shown to others	
imai <u>l</u> address:	ciw.student100@outlook.c		
Password:	•••••		
	Remember password		
Configuration	found in Mozilla ISP database		
Incoming:	POP3, pop3.live.com, SSL		
Incoming: Outgoing:	POP3, pop3.live.com, SSL SMTP, smtp.live.com, START	rLS	
Incoming: Outgoing:	POP3, pop3.live.com, SSL	rLS	

Figure 7-6: E-mail account settings

**9.** Click the **Create Account** button. The installation is now complete, and the Thunderbird interface will appear. Click your **Inbox**, as shown in Figure 7-7.

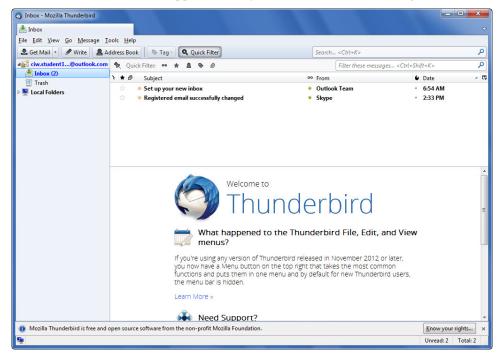


Figure 7-7: Thunderbird Inbox

- 10. Select Tools | Account Settings to display the Account Settings dialog box.
- 11. Click Server Settings to review the POP settings.
- 12. Click Outgoing Server (SMTP) to review the SMTP settings.
- 13. Close the Account Settings dialog box.
- 14. Close Thunderbird.

**OBJECTIVE** 1.6.1: E-mail clients

#### NOTE:

Be sure that you do not confuse the discontinued Webbased service Hotmail (also known as Windows Live Hotmail) with the desktop-based Windows Live Mail.

## Web-based e-mail

You can set up Web-based (i.e., cloud-based) e-mail, such as Google Gmail, Outlook.com or Yahoo! Mail, while you are online. You set up an account by registering a Web-based e-mail address with the provider. In many cases, an e-mail message confirming your request for an account will be mailed to your new Web-based e-mail address, and you must respond to the message to activate your account.

Web-based e-mail is advantageous for many reasons. You can log on and check your e-mail from any computer that has Internet access. In theory, this eliminates the need to purchase Internet service from an ISP, although most users choose to purchase Internet service so that they do not have to use a public computer to check their e-mail. You can also set up multiple accounts, and you can send attachments (if your browser supports them).

After your Web-based account is set up, you can access your e-mail using the provider's Web page. You may also be able to download messages in an e-mail client such as Windows Live Mail. Search your Web host's help menus for information or instructions about configuring your e-mail client.

In the following lab, you will configure a Web-based e-mail account using Gmail. Suppose the marketing director of your company wants an e-mail account that he can use while traveling. He asks you to set up an account for him that will be free and accessible from any location. You can set up a free Gmail account for the marketing director that he can access from any computer that is connected to the Internet.



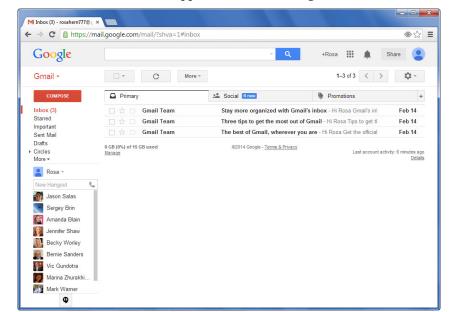
## Lab 7-2: Configuring a Web-based e-mail account using Gmail

In this lab, you will set up a Web-based Gmail account.

- 1. Open your browser and go to *www.google.com* to visit the Google home page.
- Click the Sign In link and use the Google account user name and password you created earlier in the course. (If you do not have a Google account, click the Sign In link, then click the Sign Up button to create an account.)
- **3.** The Google Accounts pages may appear with messages:
  - A page may ask if you want to add a mobile phone number or change your e-mail account. These changes are not necessary, but you are welcome to add your mobile phone number. Click **Save and Continue**.
  - Another page may ask you to re-enter your password for security purposes. Enter your password and click **Verify**.
- **4.** Your Google home page will appear. Click the **Gmail** link in the Google menu at the top of the page.

Note: If you signed in with an existing Google account in Step 2, skip Step 6.

- If you set up a new Google account in Step 2, a Welcome screen will appear. Click Next in this and each of the next few screens that prompt you to customize your account. In the last screen that appears, click Finish.
- **6.** Your Gmail home page should appear. A message may appear at the top stating "Allow Gmail (mail.google.com) to open all e-mail links?" Click **No**.



7. The Gmail Inbox window should appear, as shown in Figure 7-8.

Figure 7-8: Gmail Inbox window

- **8.** Click your e-mail address icon (the icon with the silhouette of a person in it, or the image you assigned to yourself) in the upper-right portion of the Web page. A drop-down menu will appear. Click **Sign Out** and return to the Gmail Sign In page.
- 9. Close your **browser**.

OBJECTIVE 1.6.6: Blind copying (BCC)

## **E-Mail Message Components**

Although e-mail programs may differ, all messages have the same basic components. Table 7-1 describes the typical elements of an e-mail message.

Component	Description
To (address) field	Contains the e-mail address(es) of primary recipient(s). The address(es) you enter here are displayed in the e-mail message header.
Cc (carbon copy) field	Contains the e-mail address(es) of additional recipient(s) to whom you want to send the message. The address(es) you enter here are displayed in the e-mail message header.
Bcc (blind carbon copy) field	Contains the e-mail address(es) of additional recipient(s) to whom you want to send the message. The address(es) you enter here are not displayed in the e-mail message header. Recipients designated in the To and Cc fields will not be able to see recipients you specified in the Bcc field.
Subject field	Contains a brief description of the message content.
Attachment field	Indicates a file or files that are attached and sent with the message.
Message field	Contains the body of the message. You type your message directly into the message area.
Signature field	Contains a few lines of text that appear at the bottom of each message you send. A signature generally consists of the sender's contact information.

The To, Cc, Bcc, Subject and Attachment components constitute the e-mail message header. The e-mail message header contains information about the message (such as its author, its intended recipients, its general content and whether separate files are attached), but is separate from the body of the message. The e-mail message header generally displays in a portion of the message window separate from the body of the message.

At the very least, an e-mail message must include one address in the To field. Windows Live Mail and Mozilla Thunderbird will prompt you if you attempt to send a message without a Subject line, although you can choose to send the message anyway. It is also possible to send an e-mail message that contains no body text, but doing so may have no purpose.

#### attachment A file that is sent with an e-mail message.

**Attachments** are separate files that you add to e-mail messages. When you attach a file using Windows Live Mail, a file icon, along with the name of the attached file, displays in the e-mail message header. (Other e-mail clients may display attachments differently.) When you receive a message that contains an attachment, an attachment icon displays to the left of the message subject in your Inbox. You can download and read the attachment, save the attachment to your hard drive or other storage location, or delete it. You will attach files to messages and open attachments in an upcoming lab.



## **CIW Online Resources – Online Exercise**

Visit CIW Online at *http://education.Certification-Partners.com/CIW* to complete an interactive exercise that will reinforce what you have learned about this topic.

Exercise 7-4: E-mail message components

## **Creating and Sending E-Mail Messages**

Toolbar buttons and display windows vary among e-mail clients, but generally, the steps required to create and send an e-mail message are the same. To create an e-mail message, you click the command to create a new message, enter an address in the To field, enter a Subject line, type the message, attach any necessary files, then click the command to send the message.

## Creating messages in Thunderbird

To create messages in Thunderbird, you display the Compose window. Type the recipient's e-mail address in the To field. Type the subject of your message in the Subject field, then click in the message area of the window to type your message. When your message is complete, click the Send button to send the message.

By default, Thunderbird saves a copy of every message you send in the Sent folder. E-mail client folder structure will be discussed at length later in this lesson.

In the following lab, you will create and send e-mail messages using Thunderbird. Suppose your manager has assigned you the task of configuring Thunderbird on four systems. You have configured the client on each system, and now you can test each client by sending and receiving e-mail messages. NOTE:

Although the Inbox

displayed to create a message, you should display the

Inbox to see the

following labs.

NOTE:

Recall that Outlook.com

replaced Hotmail.

messages you will receive in the

need not be



## Lab 7-3: Creating and sending e-mail messages using Thunderbird

In this lab, you will create a new e-mail message in Thunderbird.

- 1. Start **Thunderbird** and enter your password (e.g., *password*). In the All Folders pane (the left pane), click **Inbox** to display your Inbox.
- **2.** Click the **Write** button to display the Write window. Notice that the From, To and Subject fields display in the header.

*Note: The Cc and Bcc fields do not display by default. To display them, click the dropdown arrow at the left side of the To field, and select Cc or Bcc from the list.* 

- In the To field, type your Outlook.com e-mail address (e.g., *ciw.yourname@outlook.com*) to address the message to yourself.
- **4.** Press **TAB** to move the cursor to the Subject box, then type **Test Message** as the subject.
- 5. Press TAB to move the cursor to the message area of the window, then type:

#### This is a test message.

This step enters the message text. Your message should resemble the one shown in Figure 7-9.

😪 Write: Test Message	x
<u>File Edit View Insert Format Options Iools Help</u>	
🧱 Send 🖌 Spelling 🔹 🛛 Attach 🔹 🖨 Security 🔹 🖬 Save 🔹	
From: Rosa Hernandez < ciw.student100@outlook.com> ciw.student100@outlook.com	•
To: 🔒 ciw.student100@outlook.com	
Subject: Test Message	
Body Text ▼ Variable Width ▼ ■ A' A' A A A 🗄 ½ 🗄 🖽 Ξ • 🗐 • 🙂 •	
This is a test message.	
	2

Figure 7-9: Creating message in Thunderbird

- 6. Click the **Send** button to send your message to the mail server.
- 7. Minimize the Thunderbird window.

## Creating messages in Gmail

To create messages in Gmail, sign in to your account, then click the Compose button to display a blank New Message window, as shown in Figure 7-10.

New Message	_ ~ ×
То	Cc Bcc
Subject	
Send <u>A</u> U +	<b>i</b> .

Figure 7-10: Creating message in Gmail – New Message window

Notice that in Gmail, the Cc and Bcc fields do not display by default. You must click the Cc and Bcc links to display the fields.

Type the recipient's e-mail address in the To field. Type the subject of your message in the Subject field, then click in the message area of the window to type your message. When your message is complete, click the Send button to send the message.

In the following lab, you will create and send e-mail messages using Gmail. Suppose you have set up a Gmail account for the marketing director of your company. You can test the account by using it to send and receive e-mail messages.



## Lab 7-4: Creating and sending e-mail messages using Gmail

In this lab, you will use Gmail to send an e-mail message to a classmate and send a blind carbon copy to yourself.

- 1. Open a browser and go to *mail.google.com*.
- **2.** Sign in to your Google account by entering your username and password, then click the **Sign In** button to display your Gmail Inbox.
- **3.** Click the **Compose** button to open a blank New Message window.
- 4. In the To field, type your classmate's Outlook.com e-mail address.
- **5.** Click the **Bcc** link to display the Bcc field. Enter **your Gmail** e-mail address in the field.
- 6. Press TAB twice to move to the Subject field, then type: A Brief Message From Me.

- 7. Press TAB to move to the message area, then type: This is a test message from Gmail.
- **8.** Click the **Send** button to send your message. Click the **Refresh** button (the button that looks like a circular arrow pointing in a clockwise direction) to view the message you sent to your classmate and to yourself. Notice that the message you sent was also delivered to you, because you specified your own address in the Bcc field.
- 9. Minimize the **browser** window.

## Creating e-mail signatures

An e-mail signature consists of a few lines of text that appear at the bottom of each of your messages. A signature might identify your position, the department in which you work or both. Typical signatures include the sender's name and e-mail address. Your signature can also include the name of your company, a Web address and a phone number. The signature is a reminder to your recipients of your identity or the identity of your company. Following is a sample signature:

J.Q. Student, IT Professional Putting the Internet to Work Student51@class.com (800) 555-0162

In Thunderbird, you create an external signature file containing your custom signature. You can then link to that file from Thunderbird to automatically add your signature to your outgoing e-mail messages.

Most Web-based e-mail programs also include options for creating and attaching signatures automatically. Some also allow you to format the text in your signature.

In the following lab, you will create e-mail signatures in Thunderbird and Gmail. Suppose the marketing director has asked if it is possible to automate the process of adding his signature block to all outgoing messages. You can create an e-mail signature in each email client to automate this process for him.



#### Lab 7-5: Creating e-mail signatures in Thunderbird and Gmail

In this lab, you will create a signature block for your e-mail messages and then configure Thunderbird to attach your signature to outgoing messages. You will also create an email signature from within Gmail.

- **1.** First, you will add your signature file to outgoing messages in Thunderbird. Restore the **Thunderbird** window.
- 2. Select **Tools | Account Settings** to display the Account Settings dialog box.
- **3.** Click your e-mail account in the left pane. In the **Signature Text** box, create a simple signature block using your name, the name of the company for which you would like to work, your Outlook.com e-mail address and a phone number. Click **OK**.
- **4.** On the toolbar, click the **Write** button to compose a new message. Notice that your signature appears at the bottom of the message.

E-mail signatures are very popular in the workplace Many businesses require employees to use signatures that identify their names. titles and contact information in their e-mail messages. Company standards usually specify the preferred e-mail signature format. You can even use images, such as company logos, in the signature.

**OBJECTIVE** 1.6.3: E-mail signatures

NOTE: See Optional Lab 7-1: Creating an email signature in Outlook.com.

- **5.** Address the new message to yourself at your **Outlook.com** account, write a brief message, then click the **Send** button. On the toolbar, click the **Get Mail** icon to receive your mail.
- 6. Minimize the **Thunderbird** window.
- 7. Next, you will create a signature in Gmail. Restore the **browser** window.
- **8.** Click the **Settings** button (the button that looks like a circle with six studs on it) in the upper-right portion of the page and select **Settings**. The Settings page will appear.
- **9.** Scroll down the page and click anywhere in the **Signature** field. Create a simple signature block using your name, the name of the company for which you would like to work, your **Gmail** e-mail address and a phone number.
- 10. Scroll to the bottom of the Settings page, then click the Save Changes button.
- **11.** Click the **Compose** button to open a New Message window. Notice that your new signature appears.
- 12. Close the New Message window to cancel the message and return to your Inbox.

**13.** Minimize the **browser** window.

## Using e-mail address books

E-mail programs include address books that allow you to store names and information for your frequently accessed e-mail contacts. Address books can contain e-mail addresses, names or aliases, phone numbers, street addresses and other relevant data. You can select a name from the address book list instead of typing an e-mail address each time you want to send a message.

Address books vary among e-mail clients, but all serve the same purpose, and many include features that will allow you to import contact names from other address books in other applications.

Using an address book to insert e-mail addresses is fast, convenient and accurate. Users do not need to remember or type addresses and can select several recipients at once. Most company e-mail systems include a global address book that contains the e-mail addresses of all company employees.

**OBJECTIVE** 1.6.13: Sharing files via e-mail

#### NOTE:

Most mail servers limit attachment size. For instance, many mail servers will not send e-mail messages with attachments larger than 2 MB. The mail administrator specifies the maximum attachment size based on users' needs.

## Attaching files to e-mail messages

You can attach almost any kind of file to an e-mail message. The ability to attach files (such as word processor documents, presentations, spreadsheets and images) to your messages makes e-mail a powerful tool, and allows users to share files and documents within their organization or with users in other organizations. Compression utilities (which will be discussed in a later lesson) enable you to compress large files into smaller sizes to send them efficiently across the Internet. E-mail clients use MIME to identify attached files by their file type.

Most e-mail clients display attachments in the e-mail message as separate links, such as a paper-clip icon. However, some display text attachments as additional text directly within the e-mail message. Older e-mail clients detach files from your e-mail messages upon arrival and automatically place the files into an attachment directory instead of leaving them attached to the message. These legacy e-mail clients do not indicate that an attachment is included, and some may not receive attachments properly. Therefore, it is advisable to use an up-to-date e-mail client, such as the ones used in this class.

The recipient of a message with an attachment can open and edit the attached file in the appropriate application if that application is installed on his or her computer. To avoid frustrating your recipient, verify that he or she has the software necessary for viewing or editing the attached file before you send it.

#### E-mail attachments and the server

Your organization's e-mail server may scan or even block e-mail attachments. Attachment scanning always takes place at the server, usually just after the message has been received via SMTP. Attachments are scanned because they may contain malicious code that can be used to damage or infiltrate systems. E-mail attachments are sometimes blocked completely for various reasons. Some companies block them to increase security. Others block attachments because they are deemed unnecessary or because they consume too much bandwidth.

In the following lab, you will add attachments to e-mail messages. Suppose your supervisor is working from home and asks you to send her several files that are located on her office computer. You can attach the requested files to an e-mail message and send them to her.



### Lab 7-6: Attaching files to e-mail messages

In this lab, you will attach files to e-mail messages using Thunderbird and Gmail.

- 1. First, you will attach a file in Thunderbird. Restore the **Thunderbird** window.
- **2.** Click the **Write** button, and address the new message to your **Outlook.com** e-mail account.
- **3.** Type *Benefits Overview Information* in the Subject field to indicate the subject of the message.
- 4. As the body of the message, type the following:

Attached please find Benefits Overview documents. Please review these documents before attending the Benefits presentation.

- 5. Click the Attach button on the toolbar to display the Attach File(s) dialog box.
- 6. Navigate to the C:\CIW\Internet\Lab Files\Lesson07 folder.
- 7. Click **Benefits Overview.doc**, press and hold **CTRL**, click **Benefits Overview.pdf**, release **CTRL**, and then click the **Open** button to attach these two files.
- 8. Click the **Send** button to send the e-mail message with the attachments. Click the **Get Mail** button to receive your mail.
- **9.** Click the **Benefits Overview Information** e-mail. Click the **2 Attachments** link that appears at the bottom of the window. The attached files will appear.

10. Minimize the Thunderbird window.

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OBJECTIVE 1.6.12: E-mail attachments

#### NOTE: Notice the

paperclip icon that appears to the left of the Benefits Overview Information e-mail, indicating the presence of one or more attachments.

- **11.** Next, you will attach a file in Gmail. Restore the **browser** window.
- 12. Create a new message and address it to your Gmail account.
- **13.** Type **Benefits Overview Information** in the Subject field to indicate the subject of the message.
- **14.** As the body of the message, type the following:

## Attached please find Benefits Overview documents. Please review these documents before attending the Benefits presentation.

- **15.** Click the **Attach Files** button (the paperclip icon at the bottom of the New Message window) to display the Open dialog box.
- 16. Navigate to the C:\CIW\Internet\Lab Files\Lesson07 folder.
- **17.** Click **Benefits Overview.doc**, press and hold **CTRL**, click **Benefits Overview.pdf**, release **CTRL**, and then click the **Open** button to attach these two files.
- 18. Click the Send button to send the message with the attachments.
- **19.** The message should arrive in your **Inbox**. If not, click the **Refresh** button until it does arrive.
- **20.** Select the **Benefits Overview Information** e-mail that you just sent to yourself. Notice the two attachments that appear below the message text.
- 21. Return to your Inbox, then minimize the browser window.



## CIW Online Resources – Course Mastery

Visit CIW Online at *http://education.Certification-Partners.com/CIW* to take the Course Mastery review of this lesson or lesson segment.

IBA Lesson 7 - Part A

## **Receiving and Viewing E-Mail Messages**

Most e-mail programs contain all the tools you need for composing, sending and receiving messages. The e-mail client's folder structure provides tools for viewing, storing and organizing items.

Although the folder names and order may vary from one client to the next, most e-mail programs include an Inbox folder, a folder for sent messages, a folder for deleted items and a folder for drafts. They also include an Outbox folder, which can contain messages that are queued for sending. This feature is very helpful for users with dial-up accounts or those who temporarily cannot access an Internet connection. It allows them to work offline and accumulate messages, then connect to the Internet for a few minutes to send all their queued messages at once, and then log off again.

The Thunderbird window is divided into four major sections:

- The **toolbar** contains shortcuts to the most frequently used e-mail tools.
- The All Folders pane displays the e-mail client's organizational structure.

- The **Message** list displays the messages in your Inbox (or any folder in the structure that you choose to display).
- The **Preview** pane displays the text of any message you select in the Message list.

Figure 7-11 shows the sections of the Thunderbird window.

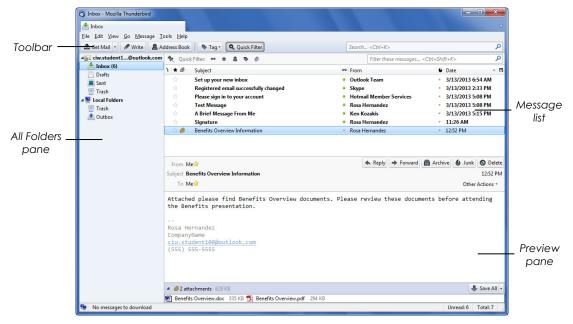


Figure 7-11: Thunderbird window sections

## **Receiving e-mail messages**

Most e-mail clients, including Thunderbird, can be configured to check the incoming mail server at regular intervals so that you can receive mail continuously while you are online. You can also check your incoming mail server at any time using the Get Mail (or equivalent) icon in the toolbar. To check for incoming messages in a Web-based e-mail application, click the Inbox link in the folder structure or click some other appropriate link to check the server.

When you send and receive mail, any messages stored in your Outbox (or equivalent) are sent, and a copy of each message is stored in the Sent (or equivalent) folder. Incoming messages are routed to your Inbox.

## Viewing e-mail messages

When you display the Inbox folder, information about each message displays in the Message list. A Message list usually displays the name of the sender, the subject of the message and the date received for each message. (If you display the Sent folder, the Message list displays recipient names, message subjects and sent dates.) The Message list also features columns that indicate the priority of a message, whether a message has been flagged, and whether a message includes an attachment.

Unread messages are usually represented by a closed-envelope, or similar, icon. Most email programs allow you to use a Preview pane in which the text of the currently selected message displays below the Message list.

Double-click a message in the Thunderbird Message list to open it in a separate window. In a Web-based e-mail program, click the link for the message to open it. In the following lab, you will receive and view e-mail messages, and you will save attachments to your computer. Suppose your supervisor has sent you a draft of a contract in an e-mail attachment and has asked you to complete various portions. You can save the attachment to your system, work on the document, save your changes, and then send the amended version as an e-mail attachment back to your boss.



## Lab 7-7: Receiving and viewing e-mail messages

In this lab, you will receive and view e-mail messages and attachments using Thunderbird and Gmail.

- **1.** First, you will receive and view mail in Thunderbird. Restore the **Thunderbird** window.
- 2. On the toolbar, click the Get Mail button to send and receive all messages.
- **3.** In the All Folders pane, click **Inbox** to display the Message list. Notice that the text of the selected message is displayed in the Preview pane.
- 4. Click the message with the attachments to display its contents in the Preview pane.
- Next, you will view and save attachments in Thunderbird. Double-click the message with the attachments to display its contents on a separate tab. Click the 2
   Attachments link at the bottom of the message window. The Benefits Overview.doc file and the Benefits Overview.pdf file will appear.
- **6.** Right-click **Benefits Overview.pdf** to display a drop-down menu. You can either open the attachment, or you can save it to your hard drive without opening it. This task can also be done from the Preview pane.
- **7.** In the attachment drop-down menu, select **Open** to display a dialog box in which you specify the application you want to use to view the document. Notice that the default application is Adobe Reader because you have specified to open a PDF file.
- 8. Click **OK** to launch Adobe Reader and view the document.
- 9. Close the Adobe Reader window.
- **10.** Right-click **Benefits Overview.doc**, then select **Save As** to display the Save Attachment dialog box. You can specify to save attachments to any location you choose. Navigate to your Desktop.
- **11.** Click the **Save** button to save the attachment to your Desktop.
- **12.** Close the message tab to return to the Message list.
- 13. In the Message list, click the Benefits Overview Information message to select it, if necessary, then press DELETE to move the message to the Trash folder. Moving a message to the Trash folder is equivalent to placing a file in your computer's Recycle Bin it will remain there (and can be restored) until you empty the Trash folder.
- 14. Minimize the **Thunderbird** window.
- 15. Next, you will receive and view messages in Gmail. Restore the **browser** window.
- 16. Click the **Refresh** button to download any new messages from the mail server.

- **17.** Click the link for the message with the subject **A Brief Message From Me** to display it in a separate message page.
- 18. Click the Inbox link to return to the Inbox.
- 19. Select the check box to the left of the Benefits Overview Information message to mark the message, then click the **Delete** button (the button that looks like a trash can) to move the message to your Trash folder. You can click the **Empty Trash Now** link in the Trash folder to remove the message permanently.
- 20. Sign out of your Gmail account.
- 21. Close the **browser** window.

**OBJECTIVE** 1.6.9: E-mail in the workplace

## E-Mail in the Workplace

E-mail is used in today's workplace for accomplishing a wide variety of tasks. Employees use e-mail to communicate with one another, to share files across the company or with other organizations, and to document and track the progress of projects. Some e-mail clients, such as Microsoft Outlook, also include calendar features that allow you to schedule meetings and send reminders via e-mail.

The following sections will describe the options available for responding to e-mail messages, and it will discuss some guidelines for keeping e-mail professional in the work environment.

**OBJECTIVE** 1.6.7: E-mail forwarding and replying

## Responding to e-mail messages

E-mail clients offer several options for responding to messages. You can reply to the sender, you can reply to everyone addressed in the message, or you can forward the message to another user. Table 7-2 describes the result of each action.

E-Mail Response Command	Result
Reply	Displays a message window that automatically inserts the address of the original sender in the To field, the message subject and a copy of the original message. The subject line is prefaced by the letters <i>RE:</i> indicating that this message is a response.
Reply All	Displays a message window that automatically inserts the addresses of the original sender and all other recipients copied on the original message in the To field (or Cc field); the message subject; and a copy of the original message. The subject line is prefaced by the letters <i>RE:</i> indicating that this message is a response.
Forward	Displays a message window with a copy of the original message. The original subject line is automatically inserted and the subject line is prefaced by the letters <i>FW</i> : or <i>FWD</i> : indicating that this message is a forwarded copy of someone else's message. No addresses are inserted in the To or Cc fields.

Table 7-2: E-mail response options

### **Reply and Reply All**

When responding to e-mail messages that you have received, if you want to address only the original sender of the message, click the Reply button. If you want to address everyone copied on the original message, click the Reply All button. When you click Reply or Reply All, the text you type is distinguished from the text of the original message. In the Microsoft Outlook e-mail client, your text displays in blue (by default) and flush with the left margin. The original text of the message, which is generally included by default, appears indented and is preceded by a divider reading:

-----Original Message-----.

In Windows Live Mail, text from the original message is also preceded by:

-----Original Message-----.

In both e-mail clients, the address of the original sender and recipient(s) displays in the text from the original message. The subject line is prefaced by the letters *RE:* indicating that the message you are sending is a response.

When you reply to a message, any attachment(s) from the original message are not included on the response message. Therefore, if you add any recipients to the response, be aware that they will not receive any material attached to the original message unless you attach it again.

#### Forward

If you want to send the message to a user who did not receive the original, click the Forward button.

When you forward a message to another recipient, the text you type is distinguished from the text of the original message in the same manner that it is distinguished from the original text of the message to which you have replied. The subject line is prefaced by the letters *FW*: or *FWD*: indicating that the message you are sending is forwarded.

Unlike replies, when you forward a message, any attachment(s) from the original message are included on the forwarded message.

Some e-mail clients precede each line of forwarded text with a right-pointing angle bracket (>).

## Professional communication via e-mail

E-mail is a unique communication medium that combines the formality of a letter with the informality of a telephone call. Although e-mail is not a new form of communication, it may still be new to some users. The tendency in the busy work environment is to quickly send brief e-mail messages with little thought. Many individuals regret these hasty actions later. You should treat e-mail messages as you would treat any other written communication. The term netiquette has been coined to encourage common sense and politeness, and to establish general rules for Internet etiquette.

The workplace environment is usually professional. Professional communication via e-mail should follow the same guidelines as professional correspondence via standard mail, including the use of proper grammar and correct spelling. Following are several characteristics of professional communications to consider.

### Responsiveness

When possible, respond immediately to e-mail messages addressed to you. Most people expect more immediate responses with e-mail than they do with other forms of business communication. Responding within 24 hours makes a good impression. However, think clearly about your responses, and answer messages only when you have gathered all your information.

#### NOTE:

It is important that you understand the term netiquette. Netiquette is recommended for business purposes but is often not necessary in personal communications with friends or relatives. **OBJECTIVE** 1.6.8: E-mail etiquette

## Clarity

Remember that for business communication, it is important to be as clear as possible. Ideas should be communicated clearly and concisely to keep messages reasonably short. However, although acronyms and abbreviations such as LOL (Laughing Out Loud) or TIA (Thanks In Advance) may be familiar to you, they may not be familiar to everyone. Using acronyms and expecting them to be understood introduces the possibility of miscommunication.

## Tone

Ensure that the tone of your message is respectful and restrained, particularly if you are writing about a sensitive or emotional topic.

Remember that your reader does not have the benefit of facial clues and tone of voice to help understand your message's intended meaning. Your tone conveys your attitude toward your reader and the topic about which you are writing. Words that convey anger, stridency or sarcasm will simply distract your reader and obstruct your message.

Following are tips to control tone:

- Write an appropriate greeting A greeting such as "Hey Guys" or "Everybody" is vague. A more focused greeting such as "Hi James" or "Dear Development Team" lets recipients know exactly for whom the message is intended.
- Write an appropriate closing The closing ends the message and can serve as a final reminder of the main point or requested outcome of the message. A closing such as "Later" or "Toodles" can be used among friends or close co-workers, but is generally inappropriate in a business setting. A closing such as "I'll send you the document before tomorrow's meeting" or "Thanks for your assistance" ends the message with an action item or with courtesy.
- Use standard capitalization and spelling Avoid typing messages in all capital letters; this practice connotes shouting or anger. All lowercase letters can convey inattention or haste, and may make your message more difficult to read. Typos, non-standard (or incorrect) spelling and abbreviations look unprofessional, and may even make recipients question your competence.
- Write in active voice "I will send you the document before tomorrow's meeting" is more direct and clear than, "The document will be sent to you before tomorrow's meeting."
- **Communicate the most important items first** If you bury important items in the middle of an e-mail, the recipient may miss them or misinterpret their importance.
- **Be judicious when attempting to convey humor or sarcasm** In most cases, it is best to remain businesslike and write in a tone that is closest to the way you would speak to the recipient in person. Some people use **emoticons** in e-mail messages to give the recipient an idea of the intended tone, but this practice is not professional and is best reserved for personal communication.

## Readability

Following are additional tips for writing clear, concise, professional e-mails:

- If you have several items to discuss, write them in a numbered or bulleted list for clarity.
- Avoid fancy typefaces that may be difficult to read.

## emoticon

A combination of characters that, when read sideways, helps convey emotion in an e-mail message.

- Include an introductory sentence to let the recipient know what the rest of the e-mail is about.
- Include action items where appropriate so that the recipient knows exactly what you are expecting from him or her.
- Skip lines between paragraphs.
- Proofread your e-mail to check it for spelling and contextual errors before sending it.

## Permanence of e-mail

E-mail is permanent because it is written. Messages can be printed or forwarded to other people. This permanence can be helpful or detrimental in a business environment. Remember that after you click Send, the message cannot be retrieved.

### History

When crafting e-mail messages, consider that the time and date are added to your message automatically. Recipients generally see timestamp information adjusted to their own time zones. Be aware of this when timeliness is important to the communication.

## Subject line

Never leave the subject line blank. Choose an appropriate subject line for your message that is indicative of the message contents. Recipients generally scan subject lines to prioritize their messages. Depending on what you write as a subject, recipients may open a message immediately, file it away for future reference, forward it to someone else, or delete it. If your subject line is vague or misleading, your recipient(s) may not handle your message as expected.

Remember also that the subject line is usually visible from the Inbox view, and that your subject lines should remain professional and inoffensive.

Following are examples of inappropriate subject lines:

- <blank>
- Important! Read now!
- Questions

Following are examples of appropriate subject lines:

- New intranet login information
- Customer issues need immediate resolution
- Questions about Project X
- Company holiday luncheon

Figure 7-12 shows an example of an unprofessional e-mail in a business setting.

#### NOTE:

Consider situations in which e-mail permanence is helpful and when it might be detrimental.

🕞 Compose: (no subject)
File         Edit         View         Insert         Format         Options         Tools         Help         Image: Control of the second seco
Send Contacts Spell Attach Security Save
From: student60 < student60@class.com>
To: 📧 student61@class.com
<u>Subject</u>
Body Text Variable Width $\blacksquare$ $A^*$ $A^*$ $B$ $I$ $U$ $\coloneqq$ $1 = 1 = 1 = 1 = 1$
Hey Man!
I got the new lessons last night. THAT'S A LOT OF REVISIONS! Will try to get them in for the beta class next week.
Thanks Dude!
Ken

Figure 7-12: Unprofessional e-mail in business setting

Figure 7-13 shows an example of a professional e-mail in a business setting that attempts to convey the same message as the previous figure. Compare the tone and content of Figure 7-13 with that of the previous figure.

🕝 Compose: Course revisions - Pre-beta
File Edit View Insert Format Options Tools Help
Send Contacts Spell Attach Security Save
From: student60 <student60@class.com></student60@class.com>
To: 📧 student61@class.com
Subject: Course revisions - Pre-beta
Body Text Variable Width $\mathbf{v} = \mathbf{A}^* \mathbf{A}^* \mathbf{B} \mathbf{I} \mathbf{U} = 1 = 1 = 1 = 1$
Hi Ted,
I received your lesson revisions last night and have reviewed them. They look great. However, this large number of revisions will require some extra time to incorporate. I'll make sure all changes are in the final draft before the beta class begins next week, but it may be Friday before you receive the final draft instead of Thursday as we initially discussed. Please let me know if this causes any problems.
Regards,
Ken

Figure 7-13: Professional e-mail in business setting



Consider configuring your e-mail client to automatically check spelling on messages after you click the Send button. Doing so can help you catch typos you may not have seen before, even if you have "on the fly" automatic spell correction enabled. This feature can also help you avoid sending an e-mail message in anger or haste.

## **Recalling e-mail messages**

Generally, it is impossible to recall sent e-mail messages. Some enterprise e-mail servers have the ability to revoke e-mail on a limited basis.

E-mail service providers such as Google have created add-ons to their features that provide a limited ability to recall, or "unsend," messages. However, you have only about five seconds to recall any message after you click the Send button in these cases. If you take any longer than this, the message will have already been sent out of the server.

So, as you send e-mail message, carefully consider the fact that in most cases, once you have clicked the Send button, the message will be delivered to the recipient.

## **E-mail threads**

In business communication, it is good practice to include information from an original e-mail message in a response, generating what is known as an e-mail thread. E-mail clients usually include the original message when you click Reply or Forward. Most e-mail clients automatically format original message text in a manner that distinguishes it from the text of a reply or forward message, and most users recognize text preceded by an angle bracket (>) in the left margin to be text from an original message.

Including an e-mail thread in a continuing discussion reminds the recipients of all the previous details, and provides a record or history of an issue. Some issues may take weeks to resolve, and having a full thread of discussion may be helpful. However, if messages become too long, they can be tiresome to read. If new issues pertaining to the task at hand arise, consider beginning a new e-mail thread that will address only the new issues.

## Reply vs. Reply All

Use the Reply All option judiciously to avoid sending unnecessary communications. If an original e-mail message was addressed to 18 people, and only you and the original sender need to pursue an issue further, use Reply instead of Reply All. You will save the other 17 recipients from unnecessarily reviewing your discussion with the original sender, and you may save the original sender embarrassment. Work out your issue with the person who sent the message. If a clarifying communication needs to be sent later to the other 17 recipients, it can be done when all the issues are resolved.

## **Attachments**

Avoid sending unnecessary attachments. If you send an attachment, make sure the recipient wants it and has the ability to open it. Remember that large attachments can take a long time to download. Also, e-mail servers apply limits to attachment sizes. For instance, an e-mail provider may only allow attachments up to 20 MB.

**OBJECTIVE** 1.7.6: Network communications privacy

## E-mail privacy

An employer has legal ownership of everything an employee creates while on the job, including personal messages. Your employer has the right to read e-mail you send using company equipment and Internet connections. Your employer can also read e-mail sent to you from other sources — business acquaintances, friends, mailing lists, perhaps individuals you do not even know.

If you are given an e-mail address for company business, should you use that address to conduct private conversations as well? And if so, should you expect this correspondence

to be truly private? After all, your employer is paying for the Internet connection, the software, the browser, the operating system and so forth. If you send an e-mail message to a co-worker about another employee (perhaps discussing a promotion or a performance appraisal), is there a chance that the other employee will be able to read that message?

Although many companies now have written employee policies that address these questions, many often remain unanswered. Consider these issues before sending e-mail messages that you might expect to remain private.

## Out-of-office messages

Because people expect a fairly immediate response to e-mail messages, it is important to provide notification to those sending you e-mail when you will be out of the office for an extended period of time (such as a vacation). People may get irritated if they send an e-mail message and get no response for a prolonged period with no explanation.

Some e-mail programs, such as Microsoft Outlook, include an autoresponder, or automatic reply, feature that allows you to configure and send an automated response to e-mail messages that are received while you are away. Generally, the same automated response is sent to every user who sends you a message. Some Web e-mail clients support this feature. with their free e-mail, and others include it only as part of a premium package for which they charge a fee.

An autoresponder feature in an e-mail client automatically sends a specified response to anyone who sends e-mail to your address. The feature does not interfere with any e-mail that you receive; those messages are stored in your Inbox as usual. When you compose your automatic reply message, you should specify the period of time you will be unavailable, and when you expect to respond to e-mail and phone messages received during your absence. You may want to include information about ways you can be reached while you are away, or specify the name and contact information of a co-worker who can handle issues on your behalf. Always keep automatic reply messages brief and professional.

For example, you can create an automatic reply message similar to the following:

I will be out of the office February 16 through February 20. During that time, I will not be accessible by phone or e-mail. I will return to the office February 23 and will respond to your e-mail message at that time. If you need assistance while I am away, please contact Stephanie Miller at smiller@company.com or (800) 555-0114, extension 5555.

Some people also create and enable automatic reply messages to provide information to customers or contacts when they leave a job. Following is an example of such a message:

*My* last day as Contracts Manager will be July 7. For contract issues after that date, please contact Stephanie Miller at smiller@company.com or (800) 555-0114, extension 5555. It has been a pleasure working with you.

#### Configuring automatic replies

The automatic reply feature must be enabled manually before the absence period and manually disabled upon return. In Outlook, this feature is called AutoReply. To use AutoReply in Outlook, select Out Of Office Assistant in the Tools drop-down menu (or in newer versions of Outlook, display the File ribbon, click Info, then click the Automatic Replies button). Select the I Am Currently Out Of The Office option. Create your own automatic reply message, then click OK. AutoReply is now enabled. To test the AutoReply

OBJECTIVE

services

1.6.11: E-mail

feature before you leave, send an e-mail message to yourself. You should receive your automatic reply to the message you sent, as well as the message itself.

Once you return to your office, remember to turn off the AutoReply feature. Failure to do so can generate confusion and make you seem irresponsible. Outlook will prompt you when you launch the program after enabling AutoReply. However, you must manually disable AutoReply.

To learn more about automatic vacation/out-of-office replies for specific e-mail services, visit the following Web sites:

- Gmail (https://mail.google.com/mail/?shva=1#settings)
- Outlook.com (http://answers.microsoft.com/en-us/outlook\_com/forum/osettingsoemailset/how-to-enable-the-automatic-vacation-reply-in/136eb169-c302-439e-87cf-73c0fdfa2fcf)
- Yahoo! Mail (http://help.yahoo.com/l/us/yahoo/mail/ymail/basics/basics-52.html)



information.

are on the original.

organization.

## **CIW Online Resources – Online Exercise**

Visit CIW Online at http://education.Certification-Partners.com/CIW to complete an interactive exercise that will reinforce what you have learned about this topic.

Exercise 7-5: E-mail in the workplace

## **E-Mail Problems and Solutions**

those involving emotionally charged issues.

Although e-mail has many advantages, its widespread use has inherent problems. Several points should be considered in order to use e-mail wisely.

For example, e-mail content has contributed to several human resources issues,

including sexual harassment, offensive language and the disclosure of confidential

Sending jokes via e-mail is a popular practice. However, think carefully before using company e-mail as an arena to spread humor. You might not know who will take offense to something you find funny. And consider that one of your recipients may forward your message to others who might take offense. Remember that your name and e-mail address

It is also important to know when not to use e-mail. Confidential information (such as salary or hiring information) should be exchanged either in person or over the phone, or via the standard postal service. As previously discussed, e-mail is not private within an

Also, some situations call for "live" communication (a phone call or face-to-face meeting). E-mail can be too impersonal or slow to satisfy some types of discussions, especially

**OB IECTIVE** 1.6.10: Common e-mail issues

#### OBJECTIVE 1.6.5: Spam and filters

spam Unsolicited and unwanted e-mail messages; the online equivalent of junk mail.

Spam

Just as junk mail can fill your mailbox at home, junk e-mail can clutter your Inbox. Such unsolicited mail is called **spam**. Spam is unsolicited e-mail sent to multiple users and is often made to appear as if it came from a trusted source.

The people who send the messages, called spammers, are the Internet equivalent of telemarketers, and many commercial organizations purchase e-mail address lists for this purpose. Like a listed telephone number, your e-mail address is available through online directories. Spammers can also get e-mail addresses from newsgroups and chat rooms, and use Internet tools to search the Web and e-mail servers for valid addresses.

Spammed messages are often used for the following purposes:

- To generate sales for various services and products
- To spread malicious viruses and worms
- To spread virus hoaxes

Sending e-mail is virtually free (the only charge is for Internet service), so spam is free advertising for anyone who sends it. As with other types of marketing, the more messages that are sent, the more money an advertiser can make. Spamming can be a lucrative enterprise, especially if messages are sent in bulk.

Spammers often use automated registration programs to create large numbers of Webbased e-mail accounts. They use these accounts to send spam or to slow down a service by signing in to multiple accounts simultaneously.

**OBJECTIVE** 1.7.6: Network communications privacy

#### **OBJECTIVE** 1.6.5: Spam and filters

#### 1.5.14: CAPTCHA

CAPTCHA (Completely Automated Public Turing Test to Tell Computers and Humans Apart) A test that uses a word-verification graphic designed to differentiate humans from automated senders during online transactions.

#### blackhole list

A published list of IP addresses known to be sources of spam.

Many spammers use automated tools to search the Internet for open relays, then use the open relays to send large amounts of spam. An open relay (also called a third-party relay or an insecure relay) is an SMTP server that allows third-party relay of e-mail messages. Open relays are frequently used to support mobile users or to support multiple domains within an organization. The relay feature is part of all SMTP-based servers. System administrators must turn off the relay option to protect their servers from illicit users.

#### Combating spam

The battle against spam takes place on both the server (host) side and the client (user) side.

You have already encountered a **CAPTCHA (Completely Automated Public Turing Test to Tell Computers and Humans Apart)** when you signed up for a Web-based e-mail account. A CAPTCHA is a test designed to detect the automated systems used by spammers for registering e-mail accounts. A CAPTCHA is an automatically generated graphic presented to a user who has just submitted information or made a request of a Web server.

CAPTCHAs require that a user view a distorted text image, and then enter the text shown in the graphic into a form field before he or she is allowed to proceed with a transaction. The distorted image is easily recognizable by humans, but is a difficult challenge for a machine. When the user provides the correct response to a CAPTCHA, then his or her input is accepted for processing. A CAPTCHA is one way administrators attempt to control spam at the server.

For more information about CAPTCHAs, visit the following sites:

- www.captcha.net
- http://en.wikipedia.org/wiki/Captcha

Administrators can also block mail from IP addresses known for sending spam. A **blackhole list** (also known as a blacklist) is a published list of IP addresses known to be sources of spam. Administrators can use the list to filter out the offending IP addresses. The traffic that is filtered out simply disappears, as if sucked into a black hole.

Another server-side method for trying to control spam is the use of SMTP authentication, in which a valid name and password must be provided each time a message is sent. SMTP authentication can prevent a spammer from illicitly using your mail server to send spam.

On the client side, you can take several actions to reduce the amount of spam you receive:

# • You can set up **spam filters**, or rules, in your e-mail client. A spam filter deletes (or otherwise diverts from your Inbox) e-mail messages based on the text in the Subject line, the To and From fields, and even the body of the message.

- Many Web-based e-mail clients such as Gmail include spam filters you can configure to look for specific words. Many e-mail clients feature buttons or links that allow you to mark specific messages as spam. Gmail also has a folder called Spam designed to receive messages the server recognizes as spam. Sign in to your Gmail account and click the Spam folder to review your options.
- You can use a third-party spam filter to help control the problem. Popular free spam filters include POPFile (*http://getpopfile.org/docs/doku.php*) and K9 (*http://keir.net/k9.html*). Such third-party filters have the ability to store e-mail in a database or queue, then scan it for offending items (for example, inappropriate language). The application deletes spam and forwards legitimate e-mail to its destination. Such technology is often called store-and-forward technology.
- You can contact your ISP or systems administrator regarding spam; these parties may have or pursue solutions.

When you set up rules for controlling spam in your e-mail client, consider the following points:

- Specifying multiple conditions for the same rule means that all conditions must be met before a message becomes subject to the instructions in the rule.
- Specifying a condition that is too broad may result in false positives. A false positive is a situation in which a legitimate e-mail message is filtered out.
- Spammers often find ways to evade spam filters.

In the following lab, you will create a spam filter in Thunderbird. Suppose your company's personnel director is receiving several spam e-mail messages a day regarding free credit reports. You can set up a spam filter for her in Thunderbird to automatically delete messages that contain the words "free credit report" in the Subject line.



## Lab 7-8: Setting up a spam filter in Thunderbird

**OBJECTIVE** 1.6.5: Spam and filters

spam filter

An e-mail client

out spam messages before they reach

the e-mail Inbox

program that identifies and filters

In this lab, you will create a spam filter in Thunderbird.

- 1. Restore the **Thunderbird** window.
- **2.** First, you will set up a rule that will filter spam. Select **Tools | Message Filters** to display the Message Filters dialog box. Click the **New** button to display the Filter Rules dialog box, as shown in Figure 7-14.

Filter Rules	
F <u>i</u> lter name:	
	Mail or Manually Run           •           •           •           •           •           •
Subject 👻	contains
Perform these actions:	
Move Message to	▼ ciw.student100@outlook.com
	OK Cancel

Figure 7-14: Filter Rules dialog box

- 3. Type *Free Credit Report* in the Filter Name text box to name the filter.
- **4.** Click the **Match All Of The Following** radio button. Notice that the first and second drop-down lists default to *Subject* and *Contains*, respectively.
- **5.** Click in the text box to the right of *Contains*, then type *free credit report*. This step specifies the condition for the rule the Subject line of an incoming message must contain the words "free credit report" in the order specified before Thunderbird will take any action.
- **6.** In the Perform These Actions section, display the second drop-down list (the list that currently displays your e-mail address), then select **Trash**. This step specifies that when Thunderbird encounters a message that meets the specified condition, it will move the message to your Trash folder. Your Filter Rules dialog box should resemble Figure 7-15.

Checking Mail or Manually		
sneeking wan or wahualiy	r Run 👻	
ollowing 💿 Match any	of the following 💿 Match all <u>m</u> e	essages
	✓ free credit report	+ -
	riw student100@outlook.com	
. Indian office		
	contains	15:

Figure 7-15: Setting up spam filter

NOTE: The e-mail filter is not case-sensitive in Thunderbird. However, the words must match exactly to be filtered. For example, "Free Credit Report" will be filtered out, but "report free credit" will not.

- 7. The Free Credit Report filter now specifies that all messages containing the words "free credit report" in the Subject line, in the order specified, will be moved to your Trash folder. Click **OK** to save the new rule, then close the **Message Filters** dialog box.
- **8.** Next, you will test your spam filter. Send the spam message to yourself, or choose a partner with whom to perform the remainder of this lab. Create a new e-mail message and address it to yourself or your partner.
- 9. In the Subject line, type the following: Call now for a free credit report!
- 10. Send the message, and be sure that your partner sent the same message to you.
- **11.** Click the **Get Mail** button to check the POP server for incoming mail. Notice that no new messages display in your Inbox. You received the message sent by your lab partner, but it was automatically sent to your Trash folder.
- **12.** Click the **Trash** folder to verify that the message has been diverted.

#### 13. Close Thunderbird.

The next lesson will discuss other actions you can take to minimize the spam you receive.

## Storing e-mail messages

Most e-mail clients have a default folder structure that includes an Inbox folder, a folder for sent messages, a folder for drafts and a folder for deleted messages. Microsoft Outlook and Windows Live Mail include an Outbox folder, in which they store messages that are queued for sending but have not yet been sent. You can also create and arrange additional folders for organizing your messages, and you can move and copy messages to any of your folders.

### E-mail storage locations

Windows Live Mail writes all e-mail folders to your local hard drive. The specific location of stored messages varies by operating system. In Windows Vista, Windows Live Mail stores your mail folders in the following folder:

C:\Users\<username>\AppData\Local\Microsoft\Windows Live Mail\<account>

This folder contains each of your mail folders, and each of the files within the folders has an .eml file name extension.

Mozilla Thunderbird also writes all e-mail folders to your local hard drive and the location of stored messages also varies by operating system. In Windows 7, Thunderbird stores your mail folders in the following folder

C:\Users\<*username*>\AppData\Roaming\Thunderbird\Profiles\ xxxxxxx.default\Mail\Local Folders

This folder contains a file for each of your mail folders, and each of these files has an .msf file name extension.

Writing e-mail folders to files on a local disk makes your e-mail easily transportable. If you set up Windows Live Mail or Thunderbird on a new computer, you can copy the respective Local Folders folder from your old computer to the new one, and keep all your old e-mail.

**OBJECTIVE** 1.6.10: Common e-mail issues

## E-mail storage using IMAP, Web-based mail and LANs

E-mail file storage space may be limited if you use an IMAP server or a Web-based e-mail account, because your messages are stored on the server. Web-based, or cloud, e-mail accounts allot limited storage space on the server, and once that space is used, you must either delete some of your stored messages or purchase additional storage space. You can also use an e-mail client such as Windows Live Mail or Thunderbird to write all of your Web-based e-mail messages to your local hard drive.

In organizations that use proprietary LAN protocols for handling e-mail within the network, messages may also be stored on the server rather than on the user's computer. Many e-mail clients, such as Microsoft Outlook, allow you to archive your e-mail messages. Archiving your mail folders removes them from the server and writes them to your local hard drive. Archived Outlook files have a .pst file name extension. Storing files on your hard drive frees space on the mail server, and having local access to e-mail messages can be useful when the mail server is down.

Having local access to e-mail messages may be especially important for those who use IMAP servers. If a network problem occurs, IMAP server users may not have access to messages for a while unless they have archived messages locally. Remember that IMAP servers do not download messages to your computer automatically. The messages are stored, read and managed on the server unless you choose to download them. People who use IMAP servers should download their messages so that they have backup copies of important information stored on their computers.

When you use Web-based e-mail, your user name and password reside on a third-party server. If someone hacks into the server, the hacker will have your personal information. Web-based e-mail clients do not download messages to your hard drive. Some do not even save a copy of sent messages in your Sent folder unless you indicate that you want to save a copy. To save a copy of your mail folders on your local computer, use an e-mail client such as Windows Live Mail or Thunderbird to read (and download) messages from your Web-based account.

#### **OBJECTIVE** 1.12.2: PIM productivity tools

personal information management (PIM) program A tool used to schedule appointments and meetings, store contact information, and manage tasks.

**OBJECTIVE** 1.12.1: Calendar and scheduling software

## Personal Information Management (PIM)

You can use a **personal information management (PIM) program** to schedule appointments and meetings, store contact information, and manage tasks. Examples of PIM programs are Microsoft Outlook, IBM Lotus Organizer, Sage ACT! and CorelCENTRAL. Android, Apple and BlackBerry smartphones all offer PIM tools by default, and many apps can be purchased to expand their functionality.

You can also find freeware versions of PIM software on the Web, but not all versions are stable. Aethera is a freeware PIM package that will run on UNIX/Linux, Windows and Apple OS X operating systems. To learn more about Aethera and download the package, visit *www.thekompany.com/projects/aethera/.* 

## **Typical uses for PIM**

You can use a PIM program to keep track of appointments and meetings by scheduling them on an electronic calendar. You can schedule recurring appointments and reminders, which sound an alarm or display a dialog box. You can also use a PIM program to track tasks. Figure 7-16 shows a sample calendar containing scheduled appointments.

OBJECTIVE

e-mail

1.6.14: Web-based

and IMAP-based

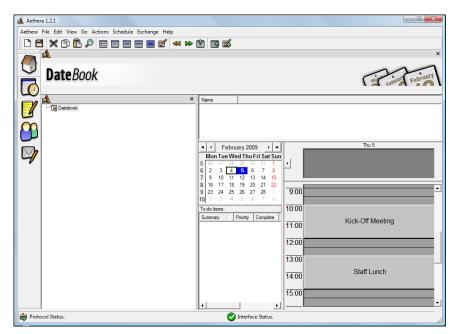


Figure 7-16: PIM calendar entries in Aethera

You can also use a PIM program to store contact information (such as names, addresses, telephone numbers and other pertinent information) for people you call or communicate with via e-mail frequently. Some PIM programs, such as Microsoft Outlook and Aethera, also provide e-mail capabilities you can use to send and receive messages over an intranet or the Internet. Figure 7-17 shows sample contact information in Aethera.

Aethera 1.2.1				
Aethera Contact Help				
10 🗙 🗈 🚯 🗣 🔂				
				×
				AB
AddressBook				A
×	Name	Email	Telephone	
Contacts		z aamez@company.com		
	Mark Anderson manderson@company.com     Jasmine Ashi jashi@company.com			
	Groannie Aan	jaaring company com		
0				
-0				
	Card for Mark Anderson			
	Mark Anderson	Phone		
	Display name: Nickname:	Work: (602) 55	5-3131	
	manderson@cor	npany com		
🖨 Protocol Status.	<b>S</b>	Folder is loaded		

Figure 7-17: PIM contact information in Aethera

Using a centralized electronic calendar to schedule meetings and reserve resources (such as a meeting room or projector) can streamline office events and prevent scheduling conflicts. Scheduling Webinars or Webcasts on a centralized calendar also informs employees about the upcoming event and can alert IT personnel, who may be called upon to troubleshoot any difficulties. IT personnel can also examine a centralized calendar to identify the best time to schedule activities, such as installing updates or patches, that might take services offline. An IT department can also publish the scheduled date for such activities and send reminders or notifications to employees if certain services may be unavailable for a period of time.

## **PIM and smartphones**

Smartphones and their predecessor, **Personal Digital Assistants (PDAs),** can store contact information, help you take notes and keep track of appointments. They can also perform complex calculations, play games, download music, browse the Web and check e-mail.

Smartphones store basic programs such as the operating system, address book, calendar and memo pad in a read-only memory (ROM) chip. As you enter or change data, your changes are saved automatically in your smartphone's random access memory (RAM), which remains intact even after you turn off the unit.

Smartphones are ideal PIMs because they are mobile and offer miniature keyboards for inputting information. Users can use a plastic stylus to make inputting data easier (rather than using their fingers). Users can enter data on the LCD screen by writing with the stylus and by tapping on the touch screen.

All smartphones include some kind of PIM software for performing PIM tasks. These tasks include storing contact information, making lists, taking notes, writing memos, tracking appointments, setting reminder alarms, planning projects, performing calculations and tracking expenses. However, not all smartphones support all of these functions.

Smartphone PIM tools work best when they work in tandem with traditional desktop or laptop computers. The information you enter into your smartphone can be synchronized with the data you enter into your PIM software on your desktop or laptop system in order to make the most effective use of both your smartphone and your computer. Many smartphones can install PIM software that can also be installed on your computer. Mainstream PIM packages that support data synchronization are also available. These tools, such as Lotus Organizer and Microsoft Outlook, keep both your smartphone and your computer up to date.

Data can be synchronized between a smartphone and a computer using a USB connector. With the correct PIM package, many smartphones can also use wireless networks to transfer files to and from a computer or computer network.



## **CIW Online Resources – Movie Clips**

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Lesson 7: Configuring a Mobile Device for e-mail



## CIW Online Resources – Course Mastery

Visit CIW Online at *http://education.Certification-Partners.com/CIW* to take the Course Mastery review of this lesson or lesson segment.

IBA Lesson 7 - Part B

OBJECTIVE

1.12.2: PIM productivity tools

Personal Digital Assistant (PDA)

A small, handheld

computer used for personal information

management. The predecessor to the

smartphone.

## Case Study

## Mastering the Art of E-Mail

Isabella is the sales manager for a large corporation, which has just hired 50 new sales interns. Isabella is scheduled to give a presentation to the interns about e-mail writing etiquette. She wants to convey the importance of writing professional e-mail messages to clients within and outside the organization.

Isabella is creating her presentation, and so far it emphasizes the following points:

- Write meaningful text in the subject line.
- Write an appropriate greeting and closing.
- Keep the message fairly brief (no more than four or five paragraphs).
- Ensure that the tone of the message is clear and reasonable.
- Use words that convey respect and show restraint.
- Proofread and spell-check the message before sending it.

As a class, discuss this scenario and answer the following questions.

- What are the merits of or reasons for each of the tips in the list above?
- What other tips should Isabella provide to help the sales interns write professional e-mail messages?

## Lesson Summary



## **Application project**

After having used two e-mail clients, which do you prefer? Which one would you recommend for your company? As with browsers, many companies choose a standard e-mail client for all employees to reduce help-desk calls and potential problems.

Suppose you are telecommuting and want your e-mail client at home to be configured for both your work and personal e-mail accounts. To accomplish this task, configure either Windows Live Mail or Mozilla Thunderbird with two e-mail accounts. If you conduct this Application Project during class, use the e-mail account information you used in this lesson's labs for your work account. Create a second account on the e-mail client using an additional account, such as a free e-mail account from Yahoo! Mail (*www.yahoo.com*), or another account from Outlook.com (*www.outlook.com*) or Gmail (*http://mail.google.com/mail*). Your free e-mail accounts will be available to you after class, but you should record the configuration information. After you finish, delete both accounts from your e-mail client, and be sure to download and delete all messages.



## Skills review

In this lesson, you learned about the functions of e-mail, and you configured and used various e-mail clients. You identified common e-mail components; you created, sent, received and viewed messages and attachments; and you identified ways to use e-mail effectively in the workplace. You also identified modern e-mail problems and solutions, and you discussed the functions of personal information management (PIM) software.

Now that you have completed this lesson, you should be able to:

- $\checkmark$  1.5.14: Explain the function of a CAPTCHA when requesting services from the Web.
- ✓ 1.6.1: Configure an e-mail client to send and receive e-mail, including SMTP, POP3, IMAP, Web-based e-mail support.
- ✓ 1.6.2: Distinguish between MIME, S/MIME and PGP/GPG.
- ✓ 1.6.3: Configure an appropriate e-mail signature and identify its usefulness in a business setting.
- $\checkmark$  1.6.4: Identify the usefulness of an e-mail thread, and when it is appropriate.
- ✓ 1.6.5: Identify spam and take steps to manage it, including creation of client-side filters and SMTP authentication.
- ✓ 1.6.6: Define blind copying (BCC).
- ✓ 1.6.7: Distinguish e-mail forwarding from replying.
- ✓ 1.6.8: Identify e-mail etiquette, including emoticons, ALL CAPS type.
- ✓ 1.6.9: Identify ways that e-mail is used in the workplace, including elements of a successful e-mail message (e.g., greeting, central message, action items, conclusion).
- ✓ 1.6.10: Identify common e-mail issues in the workplace, including harassment, when to use e-mail, e-mail message storage.
- ✓ 1.6.11: Use "Out of Office" messages for e-mail automatic reply (i.e., autoresponder) services.
- ✓ 1.6.12: Attach files to e-mail messages.
- ✓ 1.6.13: Use e-mail to share files and documents within and across organizations.
- ✓ 1.6.14: Identify concerns for Web-based and IMAP-based e-mail.
- ✓ 1.6.15: Identify situations in business environments when e-mail is more appropriate than texting for communicating, and vice-versa.
- ✓ 1.7.6: Identify privacy concerns related to network communications (e.g., e-mail, instant messaging, P2P).
- ✓ 1.12.1: Identify ways that calendar and scheduling software helps organize IT-based activities.
- ✓ 1.12.2: Identify Personal Information Management (PIM) productivity applications, including tools for PCs and smartphones.



## CIW Practice Exams

Visit CIW Online at *http://education.Certification-Partners.com/CIW* to take the Practice Exams assessment covering the objectives in this lesson.

IBA Objective 1.05 Review IBA Objective 1.06 Review IBA Objective 1.07 Review IBA Objective 1.12 Review

Note that some objectives may be only partially covered in this lesson.

## Lesson 7 Review

- 1. Name the three elements of an e-mail address.
- 2. You can receive e-mail, but you cannot send it. What type of e-mail server may be causing the problem?
- 3. What is the best method for sending the content of a word processor document to another person via e-mail?
- 4. Define the term netiquette.
- 5. Why would an alarm feature be useful in PIM software?



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