

LESSON 3

Security Issues and the Internet

In this lesson you will learn how to:

- *Customize Internet Explorer's security settings.*
- *Set Content Rating preferences.*

As you and your partners at Impact Public Relations have worked with clients on their Web-based marketing, they've asked often about security. In particular, your clients are concerned about downloading content from the Internet that might damage data on their computers. Other security-related issues voiced by clients have involved controlling access to Web sites based on content and how to transfer private information (such as credit card information) securely and easily across the Internet. These topics are important for Impact Public Relations employees as well as for your clients. Microsoft Internet Explorer addresses these issues by providing security zones and control over sensitive Web content (Content Advisor).

In this lesson, you will explore Internet Explorer's security zones to see how they help you monitor Web sites. You will also walk through the steps of activating Internet Explorer's Content Advisor tool.

Customizing Internet Explorer's Security Settings

Internet security is a hot topic—and for good reason. Both Internet content providers and Web page visitors need to be aware of security issues to help protect data. As an Internet user, you want to avoid downloading content that can damage the data you have stored on your computer. To help you control what types of content you download from the Internet, Internet Explorer provides *security zones*. Security zones help you to accept, monitor, and reject certain types of content stored on Web pages.

Using security zones is a two-tier process. First, you classify Web pages into zones; second, you apply a security level to each zone.

You can classify a page as belonging to the Local Intranet zone, Trusted Sites zone, Restricted Sites zone, or Internet zone. Then you can assign a security level to each zone—High, Medium, Low, or Custom.

Default Security Zones		
Zone	Description	Security
Local Intranet	Typically contains resources that are part of your company's internal network (or <i>intranet</i>).	Medium
Trusted Sites	Contains sites from which you believe you can download content without concern, such as an official Microsoft download site.	Low
Restricted Sites	Includes Web sites that you do not trust. You assign sites to this zone if you're not sure that you can download and run files from the site without damaging your computer or data.	High
Internet	Applies to any files that are not on your computer, your intranet, or assigned to another zone. Most Web pages on the Internet fall into the Internet zone category.	Medium

You can choose to always accept content from a trusted source by clicking the Always Trust Content From (name of source) check box.

When you assign a security level, you are concerned about the type of content that is allowed to be downloaded from Web pages. Basically, the security levels determine what action Internet Explorer takes when it encounters a Web page with a *component* or extra feature that could damage data on your computer. Keep in mind that to say that Web page content is “potentially damaging” does not mean that it is somehow nefarious or criminal. It means only that certain types of Web page content, such as *ActiveX controls* (small components, embedded in Web pages, that run on your computer), have the ability to cause harm if their author designed them to do so or designed them poorly. Using security zones to prevent “potentially damaging” content from downloading to your computer is just a matter of playing it safe—not a matter of paranoia.

Here's how each level reacts to a potentially damaging Web page component:

- High security: Internet Explorer blocks any potentially dangerous content or processes from downloading onto your computer. You will receive a message box stating that the content may not be displayed correctly due to the High security setting.



- Medium security: Internet Explorer provides a Security Warning dialog box when you visit a site that attempts to download content to your hard disk drive, as shown below. You use this dialog box to continue to download the content.

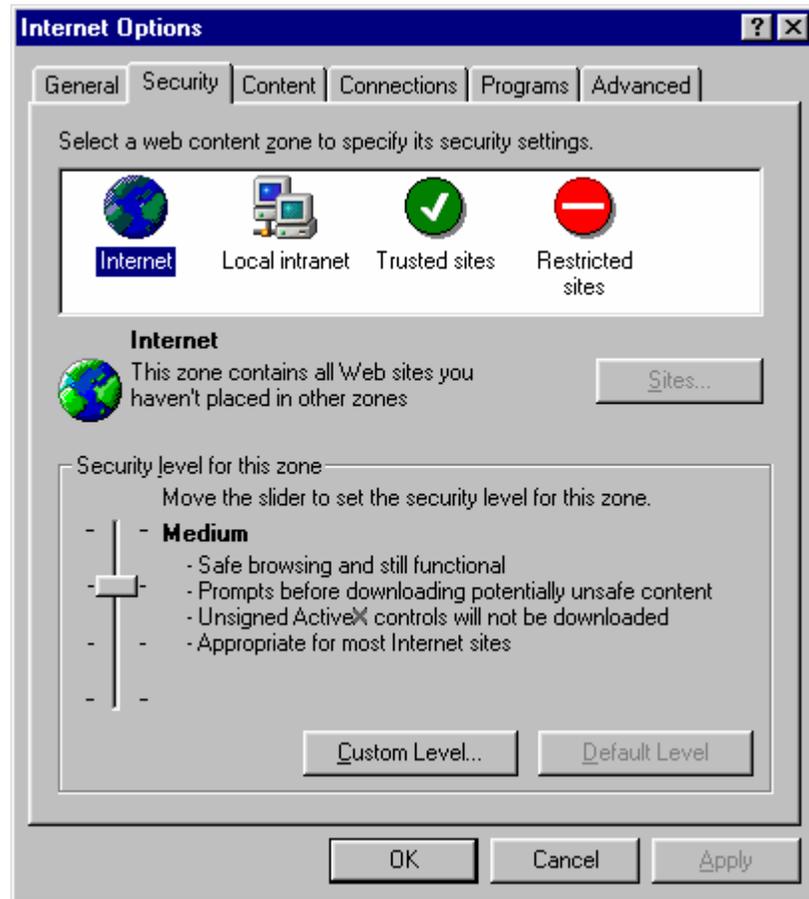


- Low security: Internet Explorer ignores any potentially dangerous content and displays the content without presenting any dialog boxes stating that potentially damaging data exists on the Web page.
- Custom security: Internet Explorer enables you to define what types of information can be downloaded. (Microsoft recommends this option for expert users only.)

Security Zones vs. Security Level

A *security zone* is the group to which a Web page belongs: Local Intranet, Trusted Sites, Restricted Sites, or Internet. A *security level* describes how to treat Web pages belonging to a security zone—with High, Medium, Low, or Custom precautions.

To manage your security zones and security levels, you use the Security tab in the Internet Options dialog box, as shown in the illustration.



View security zones

In this exercise, you review the security zones available in Internet Explorer.

- 1 Start Internet Explorer.
- 2 On the Tools menu, click Internet Options.
The Internet Options dialog box appears.
- 3 On the Internet Options dialog box, click the Security tab.
The Internet zone is selected by default, and the Medium security level is displayed in the lower portion of the dialog box.
- 4 Click Trusted Sites.
The Security tab shows information about the Trusted Sites zone, and the Low security level is displayed in the lower portion of the dialog box by default.

- 5 Click Restricted Sites.
The Security tab shows information about the Restricted Sites zone, and the High security level is displayed in the lower portion of the dialog box by default.
- 6 Click Local Intranet.
The Security tab shows information about the Local Intranet zone, and the Medium security level is selected in the lower portion of the dialog box by default.
- 7 Click OK.
The Internet Options dialog box closes.

Change a zone's security level

In this exercise, you reconfigure the Internet zone to have a High security level and then you restore the Internet zone's default Medium security level.

tip

You can create custom security settings by clicking the Custom Level button on the Security tab. If you are not well-versed in topics such as ActiveX controls, Java applets, scripting, and other Internet processes, you should use only the High, Medium, and Low security levels in Internet Explorer.

- 1 On the Tools menu, click Internet Options.
- 2 The Internet Options dialog box appears.
- 3 Click the Security tab.
- 4 Move the slider up one level and click Apply.
The security level for the Internet zone is reassigned from a Medium security level to a High security level.
- 5 Click OK.
All Web pages falling into the Internet zone classification will be treated with High security level precautions.
- 6 In the Address bar, type **msnbc.microsoft.com**, and press Enter.
The MSNBC page attempts to open on your computer, but you receive a message that your current security settings prohibit running ActiveX controls so the page may not be displayed correctly.
- 7 Click OK.
Internet Explorer downloads the MSNBC page without downloading the unsafe content.
- 8 On the Tools menu, click Internet Options.
The Internet Options dialog box appears.

- 9 Click the Security tab.
- 10 Click the Default Level button, click Apply, and then click OK. The Internet zone security level is reassigned to Medium.
- 11 On the toolbar, click the Refresh button. Internet Explorer displays a Security Warning dialog box, notifying you that the site will attempt to download content to your hard disk drive.
- 12 Click Yes to indicate that you trust this site. Internet Explorer downloads the MSNBC content to your hard disk drive.

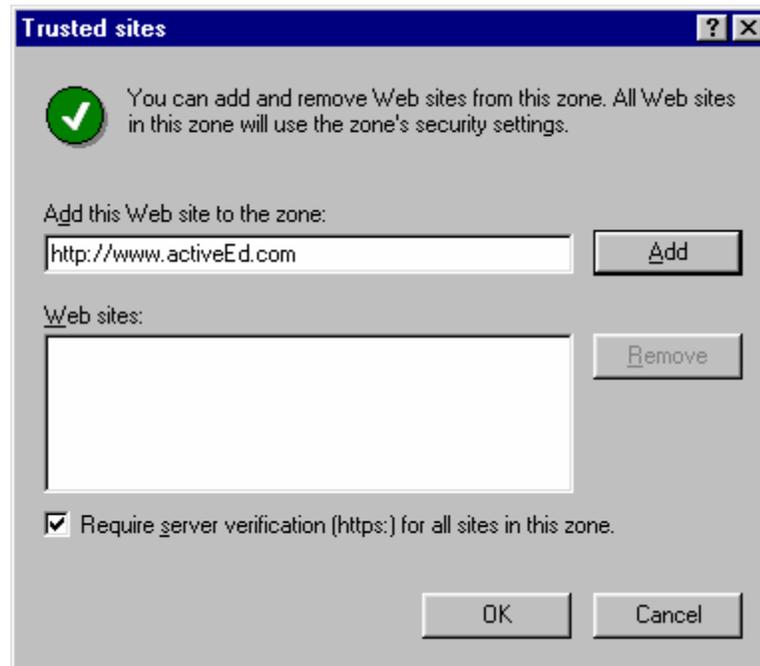
Assigning Web Pages to Security Zones

In addition to controlling the security level for each security zone, you can assign pages to the Trusted Sites and Restricted Sites zones. Your administrator should handle assigning Web pages and resources to the Local Intranet zone. All other Web pages fall into the Internet zone, which means that Web pages on the Internet are met with Medium security settings by default. If you want to assign Web pages to the Trusted Sites zone or the Restricted Sites zone, you need to add the pages manually to the appropriate zone.

tip

You cannot add Web sites to the Internet zone, because it includes all documents (aside from the documents on your computer) that do not belong to any other zone. You should assign a Web page to the Trusted Sites zone when you want to use powerful applications on the Web site without being interrupted by the Security Warning dialog box.

You can manage your Trusted Sites zone and Restricted Sites zone by adding and removing sites from each zone's Web page list.



tip

The Trusted Sites dialog box includes an option to require that trusted sites use the HTTPS protocol. (HTTPS is a more secure version of the HTTP protocol.) If you want to include Web pages that do not use the HTTPS protocol in your Trusted Sites zone, you should clear the Require Server Verification (HTTPS:) For All Sites In This Zone check box.

Add and remove Web pages from security zones

In this exercise, you add the Microsoft home page to your Trusted Sites zone. Then, before closing the Trusted Sites dialog box, you remove the site from your Trusted Sites zone.

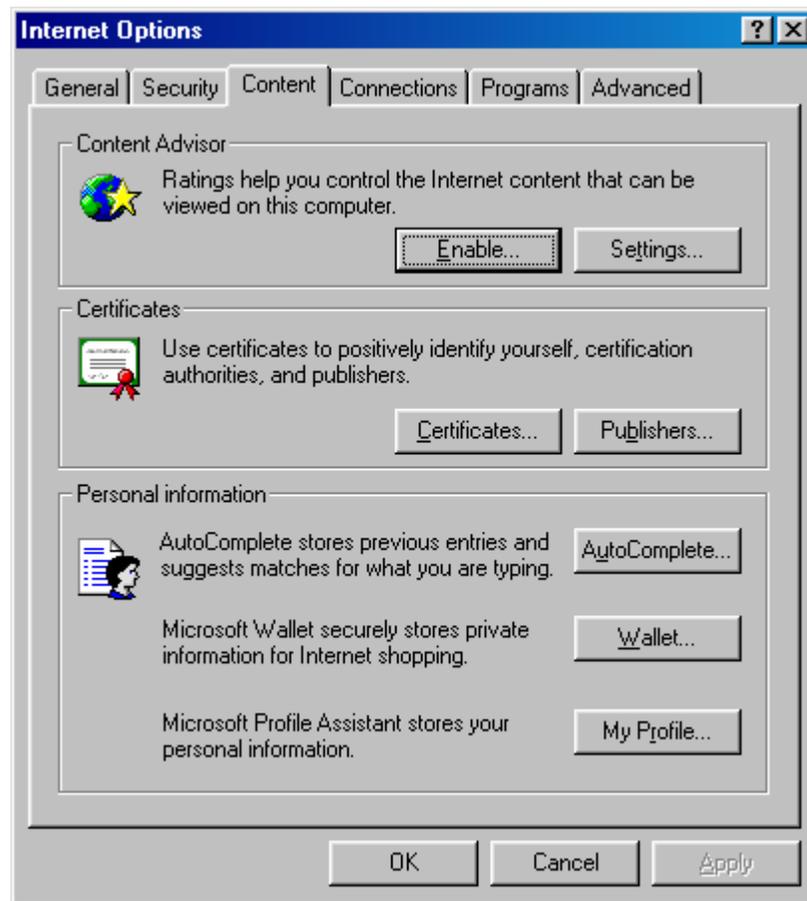
- 1 On the Tools menu, click Internet Options
The Internet Options dialog box appears.
- 2 Click the Security tab.
- 3 Click Trusted Sites.
The Security tab shows the Trusted Site zone's security level in the lower portion of the dialog box.
- 4 Click the Sites button.
The Trusted Sites dialog box is displayed.
- 5 Clear the Require Server Verification (HTTPS:) For All Sites In This Zone check box.
The option is turned off.

- 6 In the Add This Web Site To The Zone text box, type **microsoft.com** and click the Add button.
The Web Sites text box shows the Microsoft home page listed as a trusted site.
- 7 In the Web Sites text box, select the Microsoft entry, and then click the Remove button.
The Microsoft home page entry is deleted, and the site is no longer considered a trusted site.
- 8 Click OK
The Trusted Sites dialog box closes.
- 9 Click OK.
The Internet Options dialog box closes.

Setting Content Rating Preferences

Rumor has it that some employees at Impact Public Relations have been surfing the Web for entertainment instead of using the Internet to complete their work tasks. Internet Explorer's Content Advisor feature can help you control what types of sites users can visit on the Internet.

In conjunction with the Internet Content Rating Association on the Internet (ICRA), formerly known as the Recreational Software Advisory Council (RSACi), Microsoft provides a method to limit the types of sites users can view. Basically, you can define an allowable level of sex, nudity, violence, and language that can appear on a Web page. To use Internet Explorer's Content Advisor, you access the Content Advisor section in the Internet Options dialog box.

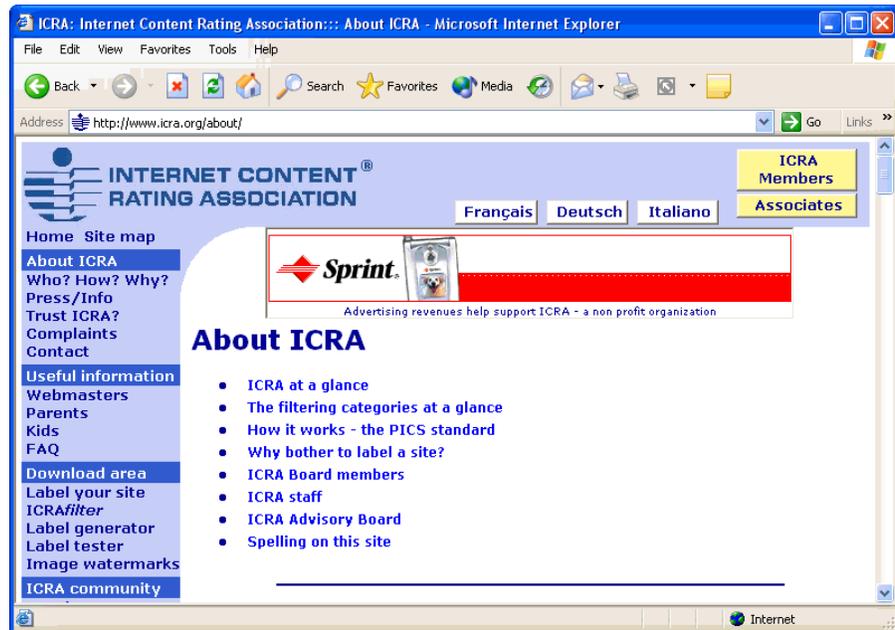


To turn on the Content Advisor, you click the Enable button on the Content tab. Then you configure what level of language, nudity, sex, and violence is acceptable on Web pages. If a rated Web page exceeds the acceptable level defined by your Content Advisor, the page will not be shown. By default, the Content Advisor is set to the most conservative (least likely to offend) settings when you first enable it. Therefore, you should manually configure your settings to suit your needs after you turn on the Content Advisor.

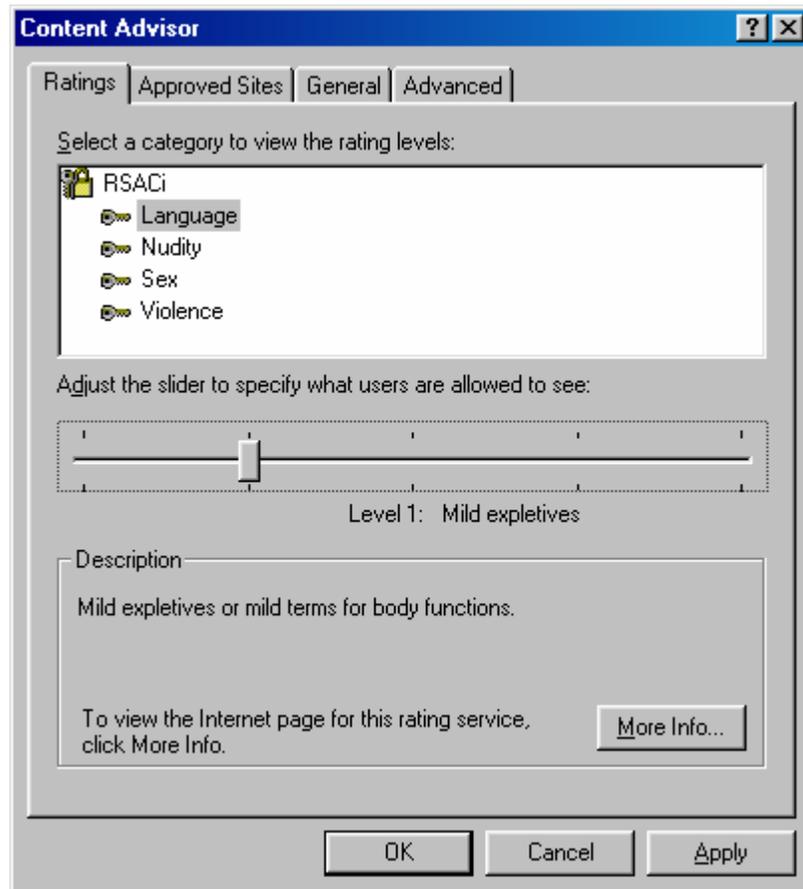
When you configure the Content Advisor settings, you rate the level of acceptable content for language, nudity, sex, and violence. The rating levels range from Level 0, which allows only the least offensive content, through Level 4, which is the most liberal setting.

For more information about Web page ratings, you can visit the ICRA Web page (www.icra.org/about/), shown in the following illustration.

You can also access the ICRA Web page by clicking the More Info button on the Ratings tab in the Content Advisor dialog box.



To configure your rating level, you use the Ratings tab in the Content Advisor dialog box, as shown in the illustration.



At present, Web page ratings are voluntary. In other words, Web sites register with ICRA to obtain a rating. Because not all sites are registered, you must choose whether you want viewers to be able to view nonrated sites.

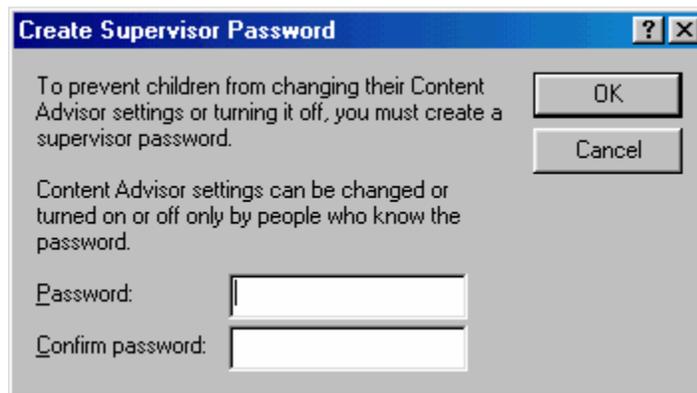
For all Content Advisor actions—enabling, disabling, and configuring settings—you need to supply a password. Make sure you choose a password you can remember easily. If you forget your password, visit the Microsoft Product Support Services page (www.microsoft.com/support) and call the appropriate number for assistance.

Enable the Content Advisor

Unless you want to change your password, you will have to create a supervisor password only once.

In this exercise, you create a supervisor password and you activate Internet Explorer's Content Advisor to limit the content that is automatically available to Web users.

- 1 On the Tools menu, click Internet Options.
The Internet Options dialog box is displayed.
- 2 Click the Content tab.
- 3 Click the Enable button.
The Create Supervisor Password dialog box appears.



- 4 Enter a password in the Password text box, press Tab, retype your password in the Confirm Password text box, and then click OK.
The Create Supervisor Password dialog box closes, and the Content Advisor alert box appears, informing you that the Content Advisor has been turned on.
- 5 Click OK.
The Content Advisor alert box closes.
- 6 Click OK.
The Internet Options dialog box closes.

Configure the Content Advisor settings

In this exercise, you change the language rating level to Level 1: Mild Expletives in the Content Advisor dialog box.

- 1 On the Tools menu, click Internet Options.

The Internet Options dialog box is displayed.

- 2 Click the Content tab.
- 3 Click the Settings button, type your password in the Supervisor Password Required dialog box, and click OK.
The Language category on the Ratings tab is selected by default.
- 4 Drag the slider to the next hash mark.
The words *Level 1: Mild Expletives* appear beneath the slider, and explanatory text is displayed in the Description area.
- 5 Click Apply, and then click OK.
A Level 1 rating setting is applied to the Language category, and the Content Advisor dialog box closes.
- 6 Click OK.
The Internet Options dialog box closes.

Handle nonrated sites

In this exercise, you configure the Content Advisor so that users can view nonrated Web sites.

- 1 On the Tools menu, click Internet Options.
The Internet Options dialog box is displayed.
- 2 Click the Content tab.
The Content tab is displayed.
- 3 Click the Settings button, type your password in the Supervisor Password Required dialog box, and click OK.
The Content Advisor dialog box appears.
- 4 Click the General tab.
- 5 In the User Options section, click the Users Can See Sites That Have No Rating check box, and click Apply.
Users will now be able to view nonrated sites.
- 6 Clear the same check box, and click Apply.
The default settings are restored, and users are not allowed to view nonrated Web sites.
- 7 Click OK.
The Content Advisor dialog box closes.
- 8 Click OK.
The Internet Options dialog box closes.

Change the supervisor password

In this exercise, you replace your existing Content Advisor supervisor password with a new password.

- 1 On the Tools menu, click Internet Options.
The Internet Options dialog box is displayed.

- 2 Click the Content tab.
- 3 Click the Settings button, type your password in the Supervisor Password Required dialog box, and click OK.
The Content Advisor dialog box appears.
- 4 Click the General tab.
- 5 In the Supervisor Password section, click the Change Password button.
The Change Supervisor Password dialog box appears.
- 6 In the Old Password text box, type your current password, and press Tab.
- 7 In the New Password text box, type your new password, and press Tab.
- 8 In the Confirm New Password text box, retype your new password, and then click OK.
An alert box appears, stating that the password was successfully changed.
- 9 Click OK.
The new password is activated, and the old password can no longer be used to open the Content Advisor.
- 10 Click OK.
The Content Advisor dialog box closes.
- 11 Click OK.
The Internet Options dialog box closes.

Disable the Content Advisor

In this exercise, you disable the Content Advisor.

- 1 On the Tools menu, click Internet Options.
The Internet Options dialog box appears.
- 2 Click the Content tab.
- 3 In the Content Advisor section, click the Disable button.
The Supervisor Password Required dialog box prompts you to enter the password.
- 4 Type your password, and then click OK.
An alert box is displayed, stating that the Content Advisor is turned off.
- 5 Click OK.
The message box closes.
- 6 Click OK.
The Internet Options dialog box closes.

Lesson Wrap-Up

This lesson introduced you to security issues on the Web. You learned how to customize Internet Explorer's Security Settings to manage security zones and security levels. Finally, you learned how to set your content rating preferences using the Internet Explorer's Content Advisor.

If you are continuing to the next lesson:

- Click the Close button in the top right corner of the Internet Explorer screen to close your browser.

If you are not continuing to other lessons:

- Click the Close button in the top right corner of the Internet Explorer screen to close your browser.

Quick Quiz

- 1 Why is security an issue on the Internet?
- 2 What is the difference between a security zone and a security level?
- 3 What are the four security zone classifications that can be assigned to Web pages, and what level of security does each one provide?
- 4 How do you get to the dialog box that lets you set security zones and levels for Internet browsing?
- 5 What can you do with the Content Advisor?

Putting It All Together

Exercise 1: Open the Start menu and select Internet Explorer from your list of programs. Type **icra.org** in the Address field and press Enter to go to the ICRA site. Spend a few minutes clicking on hyperlinks and exploring the site.

Exercise 2: On the Tools menu, click Internet Options. The Internet Options dialog box appears. Click the Content tab. In the Content Advisor section, click Enable, and then click the General tab. Under Rating systems, click Find Rating Systems. On the Content Advisor page of the Internet Explorer Home Page, you can read more about Content Advisor as well as review the available ratings systems.