# Norton Personal Firewall Advanced Options dialog box

<u>Web</u> Use options on this tab to specify on a per site basis how privacy and <u>active content</u> are handled

when using your browser to connect to various Web sites.

Privacy On this tab, you can define both global and site-specific settings to control what information your

browser sends in the <u>referer field</u>, User-agent field and email field when getting pages from a Web site. You can also define how Norton Personal Firewall handles the return of cookies to a

requesting Web site.

Active Content The settings on this tab let you define global and site-specific settings to prevent web pages

from running the following types of programs: JavaScript, Java applets, VBScript, and ActiveX controls. In addition, you can specify that animated images on web pages should not repeatedly

display the animation sequence.

Firewall On this tab, you can create and edit firewall rules to control which applications and services are

permitted to make connections and what types of packets can go out or come into the PC over

various protocols.

On this tab, you can configure the taskbar icon to be visible on the desktop, as well as set other

options.

# Web Settings: Overview

The Web tab allows you to change privacy and active content settings for individual Web sites:

Privacy On this tab, you can define both global and site-specific settings to control what information your

browser sends in the <u>referer field</u>, User-agent field and email field when getting pages from a Web site. You can also define how Norton Personal Firewall handles the return of cookies to

requesting Web sites.

Active Content The settings on this tab let you prevent web pages from running the following types of programs:

JavaScript, Java applets, VBScript, and ActiveX controls. In addition, you can specify that animated images on web pages should not repeatedly display the animation sequence.

# Choose an item for more information:

Add Site

Remove Site

**Privacy** 

**Active Content** 

### About the site list

On the Web tab in the Settings dialog box, a hierarchical site list shows each of the <u>domains</u> and sites for which web settings have been defined.

When you click a site in the list, the Privacy, and Active Content tabs show the settings defined for that site. Use options on the Privacy and Active Content tabs to maintain site-specific settings for the currently selected site.

- To add a new site or domain to the site list, click Add Site.
- To remove a site or domain from the site list, click Remove Site.

# Understanding the site list's tree structure

The site list uses a tree structure that can be up to three levels deep:

- At the root of the site list is (Defaults). Select (Defaults) to view the contents of the default blocking list that is applied to all sites.
- Each second-level entry in the site list may be either a domain name or a site name.
- Third-level entries in the site list are always site names for hosts within a domain.

When you add a <u>domain name</u> to the site list, any sites within the domain are organized as third-level entries beneath the domain name. For example, if you added the domain name ajax.com, then site entries for the web servers www.ajax.com and news.ajax.com would appear as third-level entries beneath ajax.com.

Removing a domain does not remove any site entries that are beneath that domain. If you remove a domain, all of the site entries beneath that domain are promoted within the site list hierarchy to become second-level entries.

#### Sites vs. domains in the site list

If you add a domain to the site list, you can create privacy and active content settings for the domain that will be used as defaults for all web servers within the domain.

If you add a site, you can create privacy and active content settings for the site that override the default settings defined for the (Defaults) site or for the domain that owns this site.

# Understanding the relationship between (Defaults) and the other entries in the site list

- Sites will use the Privacy rules defined for (Defaults) if no site-specific Privacy rule exists and the Cookie
   Assistant is not enabled
- Sites will use the Active Content rules defined for (Defaults) if no site-specific Active Content rule exists and the Java/ActiveX Assistant is not enabled
- To determine what active content and privacy rules are in effect at a site, select the site in the site list (left pane):
- Privacy tab: If the Use these rules for <site> check box is cleared, a message appears at the bottom of the
  tab indicating how Norton Internet Security is determining what privacy rules to use.
- Active Content tab: If the **Use these rules for <site>** check box is cleared, a message appears at the bottom of the tab indicating how Norton Personal Firewall is determining what active content rules to use.

# Add site

Click this button to open the New Site/Domain dialog box, which you can use to add a new site or domain to the hierarchical site list in the left pane. Then, type a Web site name or <u>domain name</u> and click OK to add it to the site list.

After adding a site, you can select it in the site list. Use settings on the Privacy and Active Content tabs to specify rules and block list entries that Norton Personal Firewall uses only when you visit this Web site.

# Remove site

To remove a site name or <u>domain name</u> from the site list on the Web tab, select it and then click **Remove**. Norton Personal Firewall prompts for confirmation before it removes the entry.

When a site or domain is removed, the site-specific or domain-specific privacy and active content settings are discarded.

If you remove a domain, all of the site entries beneath that domain are promoted within the Site list hierarchy to become second-level entries.

The privacy settings allow you to define rules to control how your browser handles requests for various types of information made by the sites that you visit.

The Cookies setting allows you to specify how the program handles requests for cookies when you visit a site.

The **Referer** setting allows you to specify whether third-party sites are provided with information about what site triggered a request for data from their server.

The **Browser (User-agent)** setting allows you to specify whether sites are provided with information about what kind of browser you are using.

The **E-mail (From)** setting allows you to specify whether sites are given the email address that your browser uses to identify you as the sender of mail.

# Choose an item for more information:

Cookies

Referer

Browser (User-agent)

E-mail (From)

### Cookies

Some advertisers use <u>cookies</u> to track users on a variety of sites and send the information back to their corporate server. This setting specifies how the program handles requests for cookies for the current site.

There are three ways to handle a site's requests for cookies:

**Permit** When selected, the program permits your browser to return cookies

**Block** When selected, the program prevents your browser from returning cookies.

**Reply** When selected, the program returns the string specified in the **Cookie** box instead of the cookie.

If the **Use these rules for <site>** check box is cleared, the **Cookies** settings are not available. In this case, a message below the **Use these rules for <site>** check box indicates how the program is determining what privacy rules to use.

## **Troubleshooting Tip**

In some cases, blocking a cookie or substituting a cookie reply may make it impossible to link to pages within a Web site.

Sites may use cookies to store your own Web site configuration, to remember items placed in your shopping cart at an online shopping site, or to store account and password information for subscription sites. For sites such as these, you can set up a site-specific rule to permit cookies.

### Referer

Specifies whether third-party sites are provided with information about what site triggered a request for data from their server. By default, the **Referer** field is blocked.

For example, a web page may present an advertisement by including instructions for the browser to request the advertisement from a third-party site. As part of your browser's request for the advertisement, it provides information to the advertising site about the identity of the site you visited that triggered the request. This information is passed in a referer field in the HTTP GET header (which the browser uses to make the request).

There are three ways to handle requests for referral information:

**Permit** Allows your browser to reveal the URL of the page that triggered the request for data.

Block Prevents your browser from telling a site the URL of the page you were visiting that triggered the

request for data.

**Reply** Directs your browser to insert a specific string in place of the referral data that is usually sent in

the referer field.

### **Troubleshooting Tip**

In rare cases, blocking a **Referer** field or substituting a **Referer Reply** may make it impossible to link to pages within a Web site. A Web site may use the **Referer** field to set criteria for whether pages can link to its server. For example, suppose the BeBop Concert Hall Web site provides concert reviews and sells tickets at its site. The BeBop site may not want to allow the web pages of rival ticket agencies to provide links to the concert review pages at the BeBop site. In this case, the BeBop site can check the **Referer** field to determine whether it contains a URL within the BeBop site. If it doesn't—meaning that the link came from a page outside the BeBop site—then the BeBop web server can be configured to refuse to respond to the server request.

# **Browser (User-agent)**

Specifies whether sites are provided with information about what kind of browser and operating system you are using. If you enable the privacy filter, the **Browser (User-agent)** field is permitted by default.

There are three ways to handle requests for browser and operating system information:

**Permit** Allows your browser to reveal what kind of browser and operating system you are using.

**Block** Prevents your browser from revealing what kind of browser and operating system you are using.

**Reply** Directs your browser to insert a specific string in place of the browser and operating system

information that is usually sent in the User-agent field.

### Notes

Most sites that check the **User-agent** field are attempting to provide customized page content that is compatible with your browser and operating system. However, malicious sites may want browser and operating system information in order to proceed with some type of attack. Misidentification helps to resist this type of attack.

# E-mail (From)

Specifies whether sites are given the email address that your browser uses to identify you as the sender of mail. If the privacy filter is enabled, the **E-mail (From)** field is blocked by default.

There are three ways to handle requests for email identity information:

Permit Allows your browser to provide the email address that you've defined for use as the senders

address in messages that you send.

**Block** Prevents your browser from providing the email address that you've defined for use as the

sender's address in messages that you send.

**Reply** Directs your browser to insert a specific string in place of the email address that may be sent in

the From field.

The settings on this tab let you prevent web pages from running the following types of active content: JavaScript, VBScript, Java applets, and ActiveX controls. In addition, you can specify that animated images on web pages should not repeatedly display the animation sequence.

# Choose an item for more information:

**Script Blocking** 

Binary Executable Blocking

Miscellaneous Blocking

## **Script Blocking**

Some web pages use JavaScript or VBScript to display advertising, open secondary (popup) windows, or perform other actions when you load the web page. Using the Script control, you can configure the script-blocking behavior of individual sites or of (Defaults).

- Select **Block all script** to prevent JavaScript and VBScript from running. When this option is selected, the program comments out all of the <u>HTML</u> code within <script> </script> tags to block execution of these scripts.
- Select **Block script popups only** to prevent scripts from displaying secondary or popup windows but allow them to perform other actions. When this option is selected, the program examines the strings within HTML <script> </script> tags, and removes any open method JavaScript calls.
- Select the Allow all script to execute to let JavaScripts and VBScripts work normally.
- Select the **Use default script behavior** to let (Defaults) control the blocking behavior of an individual site. Click (Defaults) to view the script blocking setting.

### Note

- Some web pages may fail to work correctly if JavaScript or VBScript is blocked.
- When **Block all script** is enabled, your browser may display a JavaScript error when it attempts to open a web page. In most cases, you can click OK to dismiss the error and continue viewing the web page.

# **Binary Executable Blocking**

Some web pages use Java applets or ActiveX controls to display advertising, open windows, or perform other actions when you load the web page. Using the Binary Executable controls, you can configure the Java/ActiveX blocking behavior of individual sites.

**Note:** The Binary Executable settings for (Defaults) is configured in the Security window and cannot be overridden using the Active Content controls.

- Select Block Java applets and Block ActiveX controls to prevent these forms of active content from running.
- Select Allow Java applets to execute and Allow ActiveX controls to execute to let these programs work normally.
- Select **Use default Java applet behavior** and **Use default ActiveX behavior** to let (Defaults) control the blocking behavior of the individual site. Click (Defaults) to view the Java applet and ActiveX settings.

**Tip:** If either **Block Java applets** or **Block ActiveX controls** is enabled, your browser may display an error when it attempts to open a web page. In most cases, you can click OK to dismiss the error and continue viewing the web page.

# **Make Animated Images Non-repeating**

To display an animated image (.GIF) on a web page, a series of graphic images are shown. The series of images are displayed repeatedly to create the animation effect.

- Select **Block animation repeating** to prevent web pages from repeatedly displaying a series of graphic images that create an animation. When selected, an animated graphic series is displayed only once when a page is accessed.
- Select Allow animations to repeat to let the animated GIF file run normally.
- Select **Use default animation behavior** to let (Defaults) control the animated GIF file. Click (Defaults) to view the animated GIF setting.

# **Firewall Settings**

Firewall rules specify what forms of network communication your PC is permitted and what services and applications can communicate with it. You can add, modify, remove, and temporarily disable firewall rules.

## Choose an item for more information:

Firewall Rules

<u>Add</u>

Modify

Remove

<u>Test</u>

### **Firewall Rules**

Lists the rules that are in effect when the firewall is enabled.

### **Tips**

- Rules are processed in the order in which they are listed.
- Once a Block or Permit rule is matched, all remaining rules are ignored. In other words, additional rules that match this type of communication are ignored if they appear below the first rule that matches.
- If an Ignore rule is matched, the type of communication that was attempted is logged to the firewall event log and then the rule processing continues until another match occurs. If there is no match, the communication is either blocked by default or the Rule Assistant is invoked.

To move a rule in the list order, click it and then use the up arrow or down arrow button to change its location in the order.

- Any TCP/IP communication that is not covered by existing firewall rules is blocked by default.
- To add a rule, click **Add**, and then use options in the Add Firewall Rule dialog box to define the new rule.
- To modify a rule, select it and then click **Modify**.
- To remove a rule from the list, select it and then click **Remove**.
- To temporarily disable a rule for test purposes, clear the rule's checkbox. The rule remains disabled until you reboot the PC or another user logs in.

# Firewall Tab

Add Click Add to open the Add Firewall Rule dialog box, where you can define a rule to permit,

block, or ignore a specific type of network communication.

Modify To change a firewall rule, click the rule and then click Modify to open the Change Firewall Rule

dialog box, where you can change the characteristics of the rule.

**Remove** To remove a firewall rule, click the rule and then click **Remove**.

Test Opens the <u>Test Firewall</u> dialog box, where you can test whether a specified type of network

communication would be permitted or would be blocked by existing firewall rules.

Note: You don't have to enable the firewall in order to test the firewall rules.

# Add Firewall Rule

Use settings in the Add Firewall Rule dialog box to define network communication rules for an application, a service, or an address.

# Choose an item for more information:

<u>Name</u>

<u>Action</u>

# **Direction**

- Protocol
- Category
  Application tab (TCP and UDP only)
  Service tab (TCP and UDP only)
- 0 Address tab
- Logging tab

# Add Firewall Rule: Name

Enter a descriptive name that identifies the rule you want to add. This rule name will appear in the **Firewall Rule** column in the rules list on the Firewall tab. The rule name will also appear in the Firewall Event Log if you choose to log events for the rule.

### Add Firewall Rule: Action

Specifies whether the rule permits, blocks, or ignores the type of network communication defined within the rule.

**Permit** Allows communication of this type to take place.

**Block** Prevents communication of this type from taking place.

**Ignore** Updates the firewall event log each time communication of this type takes place. Rule

processing then continues until a match is found. If there is no match, the communication is

either blocked by default or the Rule Assistant is invoked.

## **How To Use Ignore Rules**

When an Ignore rule is matched, logging occurs and then firewall processing continues in an attempt to match the communication to a subsequent Permit or Block firewall rule.

**Note:** For an Ignore rule to work effectively, it must appear in the firewall rule list above any related Permit or Block rule for that type of communication. It's a good idea to move all Ignore rules to the top of the firewall rule list.

The **Ignore** setting is intended to allow you to log some type of communication activity prior to enforcing a Permit rule or Block rule that applies to that type of communication. For example, suppose you have a Permit firewall rule that allows your FTP server to communicate with any network address. You could track how often users at a particular network address were connecting to your FTP server by setting up an Ignore rule to log instances of FTP server communication to and from that network address. The FTP server Ignore rule must precede the FTP server Permit rule.

### **How the Firewall Processes Rules**

The rules in the firewall rules list are processed in the order in which they are listed.

- Once a Block or Permit rule is matched, all remaining rules are ignored. In other words, additional rules that match this type of communication are ignored if they appear below the first rule that matches.
- If an Ignore rule is matched, the type of communication that was attempted is logged to the firewall event log and then the rule processing continues until another match occurs. If there is no match, the communication is either blocked by default or the Rule Assistant is invoked.

To move a rule in the list order, click it and then use the up arrow or down arrow button to change its location in the order.

# Add Firewall Rule: Direction

Specifies whether the rule applies to inbound network communication, outbound network communication, or network communication in either direction:

- Inbound communication involves packets sent to your PC. Outbound communication involves packets sent from your PC. Q

# Add Firewall Rule: Protocol

Specifies what communications protocol the rule applies to: <u>TCP</u> only, <u>UDP</u> only, either TCP or UDP, <u>ICMP</u> only.

# Add Firewall Rule: Category

Specifies the category of Internet application the rule applies to.

# Add Firewall Rule: Application Tab

Settings on this tab allow you to define whether the rule applies to a single specified application or to any application that attempts the type of network communication covered by the rule.

Application

If you want the rule to apply to a specific application, select **Application shown above**. Then enter the location and name of the application executable file.

To search the file system for the application's location, click Browse.

This setting is not available if Any application is selected.

Application Shown Above

When selected, specifies that the rule applies to the application identified in the **Application** box.

Any Application When selected, specifies that the rule applies to all applications on the local PC.

Browse

Opens the Add Application From File System dialog box, where you can select the application that will be affected by the rule.

# Add Firewall Rule: Service Tab

Settings on this tab allow you to define whether the rule applies to local or remote <u>services</u>, and whether it applies to a single specified service or to any service that attempts the type of network communication covered by the rule.

# Choose an item for more information:

Remote Service

**Local Service** 

# Add Firewall Rule: Service Tab

### **Remote Service**

In general, use the settings in this box if you are creating a rule that applies to outbound communication. This type of rule allows you to control communications to remote <u>services</u> from clients on your local machine.

## Single service

Select this option if you want the rule to apply to a single type of remote service.

# Any service

Select this option if you want the rule to apply to any remote service.

## Service name or port

If you want the rule to apply to a single service, select **Single service**. Then enter the service name (for example, <u>HTTP</u> or <u>FTP</u>) or enter the port number used by that service.

## Add Firewall Rule: Service Tab

### **Local Service**

In general, use the settings in this box if you are creating a rule that applies to inbound communication. This type of rule allows you to control access to the servers running on your local machine.

## Single service

Select this option if you want the rule to apply to a single type of local service.

## Any service

Select this option if you want the rule to apply to any local service.

## Service name or port

If you want the rule to apply to a single <u>service</u>, select **Single service**. Then enter the service name or enter the port number used by that service. For example, if you are running an <u>FTP</u> server on your PC, you might create rules that permit inbound communication to ports 20 and 21.

# Add Firewall Rule: Address Tab

Settings on this tab allow you to define whether the rule applies to local or remote addresses, and whether it applies to a single specified address or to any address that attempts the type of network communication covered by the rule.

# Choose an item for more information:

Remote Address

**Local Address** 

## Add Firewall Rule: Address Tab

### **Remote Address**

In general, use the settings in this box if you are creating a rule that applies to communication to or from a remote computer.

## **Host address**

Select this option if you want the rule to apply to a single remote <u>IP address</u>. Then specify the IP address or the name of the host in the **Address or host name** box.

### **Network address**

Select this option if you want the rule to apply to a set of addresses (for example, all the PCs on a particular subnet). In the **Address** and **Subnet mask** boxes, enter the IP address and subnet mask that defines the network address.

## Address range

Select this option if you want the rule to apply to a range of IP addresses. In the **First Address** box, enter the first (lowest) IP address in the range. In the **Last Address** box, enter the last (highest) IP address in the range.

## Any address

Select this option if you want the rule to apply to communication to or from any remote address.

# Add Firewall Rule: Address Tab

### **Local Address**

In general, use the settings in this box if you are creating a rule that applies to communication to or from your PC.

### Host address

Select this option if you want the rule to apply to a specific <u>IP address</u> for your PC. Then specify the IP address or the name of the host PC in the **Address or host name** box.

If your PC has network cards supporting multiple IP addresses or interfaces, this setting allows you to apply the rule to communication via a specific IP address or interface name. For example, if your PC is connected to a home network and also connects to the Internet, you might want to set up one rule that permits file sharing when you are connected to the home network, while setting up another rule that blocks file sharing when you are connected to the Internet.

If you want to set up a rule on a per-interface basis, you will need to determine the name or IP address of the interface. To do so:

- 1 Create a connection using the interface you are interested in.
- 2 Open the event log and click the Connection tab. Find the connection you opened and check the value in the Local column. The Local column shows the name of the currently active interface. Enter that name in the Address or host name box when creating a firewall rule for that interface.

### Any address

Select this option if you want the rule to apply to communication to or from any IP address used by your local PC.

If your PC has network cards supporting multiple IP addresses, this setting allows you to apply the rule to communication via all the IP addresses used to connect to your machine.

Settings on this tab allow you to specify whether the program should notify you when the current rule is matched and whether an event log entry should be logged.

# Choose an item for more information:

Write an event log entry when this rule is matched

Log event after <n> matches

Show Security Alert when this rule is logged

# Write An Event Log Entry When This Rule Is Matched

Specifies that an entry is logged to the Firewall event log when network communication of the type described by the rule occurs.

Suppose that the rule you are creating permits your mail client application to perform outbound TCP communication to any remote service and any remote address. If you select this check box, then each time your mail client connects to the POP3 server via outbound TCP communication, an event is logged in the Firewall event log.

# Tips

- Use the Log event after <n> matches setting to control how often an event is logged for this rule.
- Firewall events can be viewed on the Firewall tab in the Norton Personal Firewall Event Log viewer. Click the Norton Personal Firewall icon, which is in the notification area at the right side of the Windows taskbar. On the popup menu, click Event Log.

## Log Event After <n> Matches

Allows you to limit the frequency with which a rule match triggers a log event.

Specify the number of times a network communication event should match this firewall rule before a firewall event is logged or Status window notification occurs. The program counts how many times the rule is matched and writes a log event when the count reaches the number that you enter here.

For example, suppose that the rule you are creating permits inbound TCP communication to the FTP server running on your PC. If you specify a notification number of 20, then a single log event for this rule is written to the Firewall event log after 20 connections to your FTP server occur.

### Tips

- This setting is unavailable if event logging for this rule is disabled. To enable event logging, select the **Write** an event log entry when this rule is matched check box.
- The counter is restarted for rule matches whenever you restart your PC and whenever you add a new Firewall rule.

# Show Security Alert when this rule is logged

When selected, a Security Alert message is displayed at the bottom of the Status window when a network communication event matches this rule.

If you want to limit the frequency with which a rule match triggers notification in the Status window, use the <u>Log</u> <u>event after <n> matches</u> setting.

**Tip:** This setting is unavailable if event logging for this rule is disabled. To enable event logging, select the **Write** an event log entry when this rule is matched check box.

## **Test Firewall**

You don't have to enable the firewall in order to test the firewall rules. Use settings in the Test Firewall dialog box to find out whether a specified type of network communication would be permitted or would be blocked by existing firewall rules.

### To test the firewall:

- 1 Open the Norton Internet Security Advanced Options dialog box and click the Firewall tab.
- 2 Click the Test button to open the Test Firewall dialog box.
- 3 In the Test Firewall dialog box, specify the properties of the type of communication you want to test.
  - To get help on a setting in the Test Firewall dialog box, click 2 at the top of the dialog box, and then click the item.
- 4 Click Test to see how the firewall works with the type of communication you've specified.

## **Test result**

- The **Test result** indicates whether the type of communication you are testing would be blocked or permitted. It also shows the name of the rule that matches the type of communication you are testing.
- If no rule matches the test condition, the **Test result** reports that the communication is blocked by the implicit block rule: when the firewall is enabled, any communication for which there is no rule defined is blocked by default.
- When you perform a firewall test and a rule matches the test condition, that rule is highlighted in the rules list on the Firewall tab in the Settings dialog box.

## **Other Settings**

HTTP Port List. The HTTP Port List shows all of the HTTP <u>port numbers</u> monitored by Norton Internet Security. The default list contains all the standard HTTP ports, but you can add ports if you use applications that perform HTTP communication through nonstandard ports. For example, your PC may connect to the Internet through a proxy server which causes all HTTP communication to go through the port used by the proxy server. Web applications which use ports not covered in this list will not be filtered for ad blocking and active content blocking.

**Block IGMP Protocol.** Click to block the use of the Internet Group Management Protocol, a standard for <u>IP</u> multicasting on the Internet. Attackers sometimes exploit this protocol to hang a victim's machine once they obtain its IP address.

Note: You must restart your computer for a change in this setting to take effect.

**Stealth Blocked Ports.** Click so blocked ports do not respond at all to inquiries from the Internet. When your computer receives an inquiry on a blocked port, it can respond that the port is closed, or it can not respond at all. If your computer responds that the port is closed, it passes an important piece of information to the inquiring computer: that there is a computer there. If your computer does not respond at all (stealth), the inquiring computer learns nothing.

**Block Fragmented IP Packet Headers.** Click to block IP packets that have severely fragmented headers and contain data areas that are too small to be useful for legitimate network communications. IP packets of this type are used in system attacks.

Note: You must restart your computer for a change in this setting to take effect.

**Enable Automatic Firewall Rule Creation.** Click to have <u>firewall rules</u> automatically created if an application attempts to connect to the network and there are no firewall rules already in place for that application. If this option is enabled, firewall rules will be created for you that allow the application to connect to the network during the current session and in the future. You can review and edit these rules at a later time to adjust the way the firewall deals with the application.

If you want more control over the creation of firewall rules, you can disable this option so that you are prompted to create new firewall rules yourself using the Rule Assistant wizard.

# Overview of the Event Log

Norton Personal Firewall maintains individual logs for Connections, Firewall, Privacy, System, and Web History.

# Access reporting and analysis

The event logs provide a record of connections, URLs accessed, and the cookies, objects, and site referrals that have been blocked. In the Event Log viewer, each event log is displayed on a tab:

Window tab	Displays
Connections	Information about TCP/IP network connections made to and from this PC.
<u>Firewall</u>	Information about network communication intercepted by the firewall and rules that were processed. Lists the status of the Rule Assistant (interactive learning mode), shows the alerts displayed to the user by the Rule Assistant, provides summaries of <u>TCP</u> and <u>UDP</u> packet traffic, and itemizes the rules that have been enforced and created.
<u>Privacy</u>	Information about cookies that were blocked or permitted by the firewall. Lists the action taken for each cookie, the name of the cookie, and the site or domain that requested the cookie. Also shows information about <a href="referer fields">referer fields</a> that were blocked, including the address of the site from which you linked and the name of the site to which you linked.
<u>System</u>	Information about what Norton Personal Firewall services are running.
Web History	An audit trail of the URLs visited from this PC.

Click here of for more information.

# **Content Blocking Log**

Messages in the Content Blocking log provide information about ads and images that have been blocked by Norton Internet Security. The messages indicate the HTML code that was removed in order to block ads and images, the web page it was removed from, and the URL string that triggered the blocking activity.

Click Refresh to update the Content Blocking log and the tab with current information.

For general information about the Event Log viewer, click here.

Click here of for more information.

# **Connections Log**

The Connections log shows a history of all TCP/IP network connections made with this PC.

Click Refresh to update the Connections log and the tab with current information. In addition to the date and time columns for the events on the tabs, the following information is available:

Remote The address or host name of the remote site and the service or port number.

Local The local address or machine name and the service or port number being used by the

application.

Elapsed Time The amount of time that the connection has been active.

Click here {button ,JI(`>maintwo',`overview\_event\_log')} for more information.

# Firewall Log

The Firewall log provides information about network communication intercepted by the <u>firewall</u> and rules that were processed. It lists the status of the Rule Assistant (interactive learning mode) and shows the alerts displayed to the user by the Rule Assistant. It also provides summaries of <u>TCP</u> and <u>UDP</u> packet traffic, and itemizes the rules that have been enforced.

Click Refresh to update the Firewall log and the tab with current information.

For general information about the Event Log viewer, <u>click here</u>.

Click here • for more information.

# **Privacy Log**

This Privacy log displays the contents of the Privacy event log, which provides information about <u>cookies</u> that were blocked. It shows the action taken for each cookie, the name of the cookie, and the Web site that requested the cookie. It also shows information about <u>referer fields</u> that were locked, including the address of the site from which you linked and the name of the site to which you linked.

Click Refresh to update the Privacy log and the tab with current information.

For general information about the Event Log viewer, <u>click here</u>.

Click here • for more information.

# System log

The System log provides information about the program's activity as a Windows service and IP filtering activity. Details of filtering activity provide a record of inbound and outbound network connection attempts and the user action taken in response to these attempts.

Click **Refresh** to update the System log and the tab with current information.

For general information about the Event Log viewer, click here.

#### Choose an item for more information:

Refresh

**Error** 

Warning

**Information** 

<u>Alert</u>

<u>System</u>

System events are identified by type. Options on the System tab let you specify which types of events display: error, warning, information, alert, and system.

Click here of for more information.

# Refresh button (Event Log viewer)

Click **Refresh** to update the log and the current tab display with any new events that have been logged since the Event Log viewer was opened.

# Error check box (Event Log viewer)

These messages include the highest severity system errors.

To display error messages on the System tab, the **Error** check box should be checked.

# Warning check box (Event Log viewer)

These messages cover cases when software is operating in less than optimum conditions—for example, when resource usage is too high.

To display warning messages on the System tab, the **Warning** check box should be checked.

# Information check box (Event Log viewer)

These messages include information about the current status of IP filtering.

To display information messages on the System tab, the **Information** check box should be checked.

# Alert check box (Event Log viewer)

These messages notify the user of network interactions detected. For example, if the Rule Assistant is enabled, the program displays a user alert any time a new type of inbound or outbound network communication is attempted. An alert message is recorded in the event log. Alert messages provide details about the type of communication that was attempted and what action the user chose in response to the alert.

To display alert messages on the System tab, the **Alert** check box should be checked.

# System check box (Event Log viewer)

These messages indicate whether the program started as a Windows service on the PC.

To display system messages on the System tab, the **System** check box should be checked.

# **Web History Log**

The Web History event log lists the <u>URLs</u> visited by your PC, providing a history of web activity.

On this tab you can to update the history list or go to a URL selected in the list.

# Choose an item for more information:

Refresh

Go to

For general information about the Event Log viewer, click here.

Click here • for more information.

# Go to button (Event Log viewer)

On the Web History tab, to revisit a <u>URL</u> shown in the history list, click the URL and click the Go to button.

# Configuring and using the Event Log

Each tab in the Event Log viewer displays the contents of an event log file that is maintained for that category of information.

Some event log messages are longer than the message area displayed in the upper portion of the log. To see the complete message, click it. The full text is appears in the lower portion of the window.

Below is the list of data that is available for most events.

Date The date of the event.

Time The time of the event. The most recent event is listed first.

Message This is the event message. This appears on the Firewall tab, the Privacy tab, and the System

tab.

Type Indicates what type of message this is. Available only on the System tab. Message types

include: Error, Warning, Information, Alert and System.

Source The component that produced the event. Available only on the System tab.

URL Visited The URL for a Web site visited from this PC. Available only on the Web History tab.

Click here • for more information.

#### Log Menu

Commands on the Log menu let you clear the current tab or all tabs, set the maximum size for an event log file, print the events displayed on the current tab, or save the event information on the current tab to a text file.

Clear Tab Clears the events displayed on the current tab. This clears the event log file maintained for the

event category shown on the tab. After the log is cleared, new events are recorded at the

beginning of the log.

Clear All Tabs Clears the events displayed on every tab in the Event Log viewer. Effectively, this clears the

individual event log file maintained for each tab's event category. After the log is cleared, new

events are recorded at the beginning of the log.

Clear All Tabs Upon Logoff

Clears the events displayed on every tab in the Event Log viewer when you exit the program. This ensures that the event log is empty when you restart your machine. After the log is cleared,

new events are recorded at the beginning of the log.

Save Tab As Click Save Tab As to save the event log information shown on the current tab to a text file.

Print Tab Prints the contents of the event log shown on the current tab.

Change Log File Size

Opens the Log File Size dialog box where you can set the maximum size for the event log file

that is maintained for the current tab category.

In the Size box, select the file size you want. When the log file reaches its maximum, new  $\,$ 

events wrap to the beginning of the file.

**Note:** Changing the size of the log file does not take effect until you restart your PC. The current log file will be cleared. To save information in the current event log to a text file, on the

Log menu, click Save Tab As.

Click here of for more information.

# **Edit Menu**

Commands on the Edit menu let you copy selected event information to the Clipboard and to select all information on the current tab.

Copy Click **Copy** to copy the currently selected event information to the Clipboard.

Select All Click **Select All** to select all the event information shown in the event list on the current tab.

Click here • for more information.

# **About Norton Personal Firewall privacy features**

Click a topic for information about the privacy features provided by Norton Personal Firewall.

- What are cookies?
  How does Norton Personal Firewall block cookies?
  Why does my browser keep warning me about accepting cookies?
  How do I block some cookies but not others?

- What are referer fields?
  How do I block referer fields?

#### What are cookies?

Cookies are bits of information that web servers store on your computer for their later use. Web servers can use cookies to keep track of how many times you've visited and when, and what sort of information you've been surfing for on their site. They can even use cookies to pass that information on to other web servers, such as advertisement servers.

On the positive side, cookies can be used to store your own Web site configuration, to remember items placed in your shopping cart at an online shopping site, or to store account and password information for subscription sites. You may not want to block all cookies, which is why the program lets you permit or block cookies on a per-site basis.

Click here {button ,AL("Cookies",0,`',`')} for more information.

# How does Norton Personal Firewall block cookies?

<u>Cookies</u> are blocked on the way out of your computer, not on the way in. Incoming cookies are accepted, but the information that they contain is not allowed to be sent back to a web server unless you explicitly put the domain name of the server into the cookie permission list.

There are several ways for web servers to set cookies on your computer, but there's only one way that browsers give cookies back to web servers. If they're blocked on the way out, the blocker catches all of them.

Click here {button ,AL("Cookies",0,`',`')} for more information.

# Why does my browser keep warning me about cookies?

You' probably have your browser configured to warn you before accepting a <u>cookie</u>. Since the program prevents cookies from being sent to web servers, and logs what it blocked and what it permitted, it's safe to change your browser configuration so that it accepts cookies without notifying you.

Click here {button ,AL("Cookies",0,'','')} for more information.

#### How do I block some cookies but not others?

You can specify site-specific cookie blocking using the program's Advanced Options.

- To set up site-specific cookie rules, click the site in the site list, click **Use these rules for <site>**, and then use the Cookies setting to specify a cookie rule that applies to the current site only.
- To discard site-specific rules and inherit the rules defined for the site domain or for (Defaults), click to uncheck the **Use these rules for <site>** check box. The program uses privacy rules from (Defaults) when site-specific or domain-specific privacy rules are defined and the Cookie Assistant is not enabled.

To see what privacy rules are in effect at a site, select the site in the **Site** list. If the **Use these rules for <site>** check box is unchecked, a message appears at the bottom of the Privacy tab indicating how the program is determining what Privacy rules to use.

Click here for details on how to set up privacy rules for a site.

Click here {button ,AL("Cookies",0,`',`')} for more information.

#### What are referer fields?

When you click a link to a web page, your browser makes a quick note of what page you are currently viewing. When it sends the request for the new page, it passes that information on to the new server. That lets web servers that you visit to know where you've just been, which is information that you might prefer to keep to yourself.

When referer fields are permitted, your browser tells a web server that you are visiting that you clicked a link to get to them. It also tells the server what page it was that you were just visiting. When referer fields are blocked, however, the web server that you are getting a page from has no more information than if you just typed the URL into your browser or clicked it in your bookmarks.

#### How do I block referer fields?

Referer field blocking is controlled by the <u>Referer</u> setting on the Web Privacy tab in the the program's Settings dialog box.

The **Referer** setting specifies whether third-party sites are provided with information about what site triggered a request for data from their server.

For example, a Web site page may present an advertisement by including an image source tag in an HTML statement. When the page is rendered for display, the image source tag directs your browser to obtain the advertisement from a separate advertising site. As part of your browser's request for the advertisement, it provides information to the advertising site about the identity of the site you visited that triggered the request. You can prevent your browser from telling the advertising site what site you were visiting by setting **Referer** to **Block**.

# About firewalls and safety

- What does the Personal Firewall do?
- How does the Firewall block connections?
- How do I use Ignore rules?
- 0
- Why do Rule Assistant alerts pop up?
  What do I do when a Rule Assistant alert pops up?
- What are services and what are port numbers?
  What's the difference between TCP connection attempts and UDP packets?
- What is ICMP filtering and how do I enable it?
- Will the Rule Assistant alert me about ICMP packets?
  What should I do when alerted about connection attempts made to non-listening server ports?
  Why are there default Firewall rules automatically set up for me?

#### What does the Personal Firewall do?

The Personal Firewall is a filter that, when enabled, intercepts both inbound and outbound connection attempts on your computer and decides whether to permit or block them based on a list of rules. The Personal Firewall can protect against data being transmitted without your knowledge. It can warn you about attempts to use resources on your computer that you might otherwise not know about, help you learn about the resources your computer makes available to others on the Internet, and provide you with a way to control what connects to your computer and what your computer can connect to.

In most cases you do not need to configure the Personal Firewall directly—the program creates and maintains a set of firewall rules for you, based primarily on the settings in the Security window.

If you want to fine tune Personal Firewall settings or see what firewall rules are in effect, open the program's <u>Advanced Options</u> and click the Firewall tab.

#### How does the firewall block connections?

The firewall consults a list of rules, visible in the Firewall tab of the Settings dialog box, when it needs to decide how to deal with a connection. Each firewall rule prescribes an action for a specific type of network communication. The rule can block, permit, or ignore that specific type of communication.

With each new connection or packet, the firewall goes down the list of rules, in order, looking for the first rule that matches the connection or packet type in question.

- Once a **block** or **permit** rule is matched, all remaining rules are ignored. In other words, additional rules that match this type of communication are ignored if they appear below the first rule that matches.
- If an **ignore** rule is matched, the type of communication that was attempted is logged to the firewall event log and then the rule processing continues until another match occurs.

If no match is found, the connection or packet is denied. However, if the Rule Assistant is enabled, an alert gives you several options on how to deal with this communications attempt.

# How do I use Ignore rules?

When you define a firewall rule with the <u>Add Firewall Rule dialog box</u>, the **Action** setting specifies whether the rule permits, blocks, or ignores the type of network communication defined within the rule. The **Ignore** option lets you log some type of communication activity prior to enforcing a Permit rule or Block rule that applies to that type of communication.

When an Ignore rule is matched, logging occurs and firewall processing continues in an attempt to match the communication to a subsequent Permit or Block firewall rule.

**Note:** For an Ignore rule to work effectively, it must appear in the firewall rule list above any related Permit or Block rule for that type of communication. It's a good idea to move all Ignore rules to the top of the firewall rule list. To move a rule in the list order, click it and use the up arrow or down arrow button to change its location in the order.

# Why do Rule Assistant alerts pop up?

If the Norton Internet Security firewall and Rule Assistant are enabled, and network communication is being attempted to or from your computer, the Rule Assistant will indicate several things to you:

- If your computer is establishing communications with a remote computer (outbound) or if some remote computer is establishing communications with your computer (inbound)
- The name of the application on your computer that is responsible for the communications attempt
- The inbound or outbound service name or port number
- The address of the other computer communicating with your computer

The most common reason for an alert to display is that you ran an application that is trying to establish an outbound connection with another computer. (The Rule Assistant will always indicate to you what application is making the attempt.) In this case, you probably want to permit the outbound connection, and you might even want to create a rule to permit it in the future so that you aren't warned every time you try to use that application. Once you have Rule Assistant create a rule to always permit outbound communication with this application, you are giving this application permission to establish any outbound communications.

If, on the other hand, the application is something that you think should not be communicating with another computer, such as a newly installed text editor or a paint program you downloaded from the Internet, you may want to create a rule to block communications for that application.

If the communication was inbound, the Rule Assistant will indicate what application is responsible for the communications attempt. Before you get too suspicious of remote computers trying to connect to yours, bear in mind that programs often create more than one connection and some client programs that you run communicate with remote servers by asking them to connect back into your computer. An <u>FTP</u> client is a good example of this; when you run an FTP client to connect to an FTP server, one alert usually tells you about an outbound connection. Then, more alerts tell you about the remote FTP server connecting back to your FTP client whenever you send a command to the FTP server to do something.

# What do I do when a Rule Assistant alert pops up?

First, determine what communication happened that made it pop up. Then decide whether to permit or block the communication. Finally, decide whether to have the Rule Assistant create a rule that can be applied for future communications attempts.

The application name shown in the Rule Assistant alert dialog box is usually enough to give you an idea of what happened, especially when the communication is coming from a program that you just ran. The Rule Assistant alert also gives you the <u>service</u> or <u>port number</u> to consider, and the address or name of the remote host computer as well.

You can block or permit the connection for "just this attempt" until you get a feel for how often the communication occurs. You can also check the <u>Event Log viewer</u> Firewall tab to see events logged by the firewall, including how rules are being processed and what connections were permitted or blocked.

#### What are services and port numbers?

Many host computers that are connected to the Internet offer services. Services are protocols that are used to allow one computer to access a particular kind of data stored in another computer.

A computer that is connected to the Internet is usually assigned a 4-byte Internet Protocol address (an IP address) that is used to distinguish it from all other computers connected to the Internet. When you connect to a web server, for example, you may tell your browser to connect to www.symantec.com, but your computer ultimately has to translate the name to its IP address, 216.32.116.201, before the connection can be made.

When the connection is made, you also need a way to tell the computer to which you're connecting about the services in which you're interested. The host computer may be running both an HTTP server and an FTP server, and if you're connecting to the host computer using a web browser, you'll want to connect to the HTTP server and not the FTP server. This is done using port numbers. Since HTTP servers usually listen on port number 80, and FTP servers usually listen on port number 21, the web browser will connect to the correct server on the www.symantec.com computer if it connects to port 80 of the computer at 216.32.116.201 rather than to port 21. Port numbers are arbitrarily chosen numbers associated with particular services, and are always used in conjunction with IP addresses when establishing connections to host computers.

<u>Click here</u> to see the port and service assignments used when displaying messages about connections.

# What's the difference between TCP connection attempts and UDP packets?

A connection attempt is just a TCP packet that is asking to establish a connection to or from your computer. The connection may last anywhere from milliseconds to hours. A UDP packet, on the other hand, is a single packet used to transmit information without the promise of any additional information being transmitted. Your computer can send or receive a single UDP packet to exchange information without any connection being established.

Both kinds of packets are being used when you use a web browser to download a web page. If you go to http://www.symantec.com, for example, your computer first sends a UDP packet out to try to find out what the 4-byte Internet Protocol address is for the computer called www.symantec.com. The protocol used to do that is called DNS, or Domain Name Service, and the queries and replies take place without any persistent TCP connections being made.

Having a rule to permit this is important or your computer wouldn't be able to talk to other machines at all. UDP, or connectionless communication, works well for DNS because the queries and replies are very small and can be completed in single packets.

Once the web client gets the 4-byte IP address for www.symantec.com, it needs to establish a persistent connection with the site in order to fetch the web page and images because there's more data to be moved than will fit in a single packet. That's where TCP connections come into play; a TCP SYN (synchronize a connection) packet is sent to the web server, the server replies with a TCP ACK (acknowledgment). This creates a connection between the two computers, and the data starts to flow.

By default, when the firewall is enabled, inbound and outbound UDP packets are permitted. This can always be changed by editing one of the firewall rules.

# What is ICMP filtering and how do I enable it?

ICMP is a component of TCP/IP that passes control messages to and from your PC. You can set up firewall rules to filter the following types of ICMP messages:

Echo Reply (ping reply)

**Destination Unreachable** 

Source Quench

Redirect

Echo Request (ping request)

Router Advertisement

**Router Solicitation** 

Time Exceeded (used by Traceroute)

Parameter Problem

Timestamp Request

Timestamp Reply

Information Request

Information Reply

Address Mask Request

# Will the Rule Assistant alert me about ICMP packets?

By default, two ICMP firewall rules are provided that permit all inbound and outbound ICMP packet traffic. If you want to use the Rule Assistant to alert you to ICMP activity and to help create rules for specific types of ICMP messages, you should disable (or remove) the default ICMP rules.

#### Responding to alerts about connection attempts made to non-listening server ports

The Rule Assistant provides notification of inbound UDP and TCP connection attempts made to <u>non-listening</u> <u>server ports</u>. Connection attempts to non-listening server ports are detected by the NDIS filter. Alerts about such connection attempts are displayed by the Rule Assistant.

The alert indicates the type of packet used for network communication (UDP or TCP), the local service that was targeted for the connection, the remote address and service making the connection attempt and the fact that there was no service on your machine actively listening for communication sent to that service port.

Your response to the alert will depend on the way you typically use software on your PC:

If you never run the type of server identified by the alert (such as an FTP server, finger server, telnet, or web server), then you can simply create a rule to block this type of incoming communication. In this case, the firewall will discard the incoming communication packet instead of passing it on to the TCP/IP network software.

**Note:** The rule blocks connection attempts when the server is running as well as when it is not. So if you later decide to run the type of service specified by the rule, you might want to modify the rule to allow inbound connections to that service.

- If you sometimes run the type of server identified by the alert, you should create a rule to permit this type of incoming communication. The firewall will pass the incoming communication packet to the TCP/IP network software. The TCP/IP network software knows that no software is listening on the port that the connection attempt was made on, and it will reject the connection.
- If you are not sure about the connection attempt, click the **Block this one time** option to see if all of your applications still run properly after blocking the inbound connection attempt. If this is the case, then in the future, it is okay to create a rule to block this unnecessary communication.

#### Why are there firewall rules automatically set up for me?

A number of default rules are defined for the firewall. When the firewall is enabled, these rules are in effect.

# Default Inbound DNS Default Outbound DNS

These two default UDP firewall rules are needed by most home and corporate users to permit the use of the domain name service (DNS).

#### Default Inbound Bootp Default Outbound Bootp

These two default UDP firewall rules are needed by most home and corporate users to permit the use of the bootp service (bootp is short for bootstrap protocol, which enables a machine to discover its own IP address).

# Default Inbound NetBIOS Default Outbound NetBIOS

These two default UDP firewall rules are needed by most corporate users to permit the use of the <u>NetBIOS</u> name service and the NetBIOS datagram service used in file sharing on the Microsoft Network.

# Default Inbound Loopback Default Outbound Loopback

These two default TCP or UDP firewall rules permit inbound and outbound loopback connections to the localhost address of 127.0.0.1. It is usually safe to permit loopback or local connections, because the connection originator is typically a trusted application on your own PC. Even with this firewall rule enabled, remote machines will always be blocked access to the localhost address by the underlying network.

#### **Default Block Back Orifice**

This default UDP firewall rule protects you from attacks by Back Orifice.

#### **Default Block NetBus**

This default TCP firewall rule protects you from attacks by NetBus.

# Default Inbound ICMP Default Outbound ICMP

These two default ICMP firewall rules permit all types of inbound and outbound <u>ICMP messaging</u> through the NDIS layer.

### **Active content**

Active content is content that changes on your web pages, such as a weather map or a stock ticker. Most web pages provide active content by including Java scripts, Java applets, or ActiveX controls in the HTML code that defines the page.

### **ActiveX controls**

ActiveX controls are programs designed to run over the Internet. Unlike Java Applets that run in a restricted environment, however, ActiveX technology has no built-in security. As a result, ActiveX controls have the potential to take complete control of your PC and perform destructive acts on your data or system software.

## Address

In networking, an address is a numerical identifier for distinguishing one node from another.

## Address mask

A technique used to select bits from an Internet address for subnet addressing. Masks are often used to help identify a range of addresses.

#### Adult settings

Accounts based on the Adult profile will allow users to change their own account settings but not the settings of others. Here are the settings provided by the Adult profile:

- Security settings: Applications are allowed to access the network unless they match the profile of a malicious program. Java Applets and ActiveX controls are allowed to run normally.
- Privacy settings: The user is prompted before confidential information is sent from the PC to a Web site. Cookies are not blocked. Web sites are prevented from finding out the sites that the user visited or the user's email address.

## **Animated GIF**

To display an animated image on a web page, a series of graphic images is shown. The series of images is displayed repeatedly to create the animation effect.

## Banner ad

An advertising graphic that appears at the top of the browser window and runs across the page.

# Personal Firewall

The Personal Firewall lets you control access in and out of your PC. It protects you against unauthorized transfers of data from your machine and prohibits attempts by intruders to gain access to critical or personal data on your machine.

### Cache

In the context of web browsers, a web browser cache is a location on your hard disk where web pages and files (such as graphics) are stored as you view them. This speeds up the display of web pages you frequently visit or have already seen, because the browser can open them from your hard disk instead of from the Web.

## Connection

A method of data exchange that allows a reliable transfer of data between two computers.

# Connection attempt

The data transfer that requests the opening of a connection.

### Cookie

Cookies are bits of information that web servers store on your computer for their later use. Web servers can use cookies to keep track of how many times you've visited and when, and what sort of information you've been surfing for on their site. They can even use cookies to pass that information on to other web servers, such as advertisement servers.

On the positive side, cookies can be used to store your own Web site configuration, to remember items placed in your "shopping cart" at an online shopping site, or to store account and password information for subscription sites.

## Domain

A group of computers on a network administered as a unit. Within the Internet, subdomains or hosts sharing a common part of an IP address are said to be in the same domain.

### Domain name

A domain name locates an organization or other entity on the Internet. For example, the domain name www.symantec.com locates an Internet address for a domain name where "symantec.com" is the domain and the particular host server is "www." Together, "www.symantec.com" constitutes a fully-qualified domain name.

### Domain name server

A node that resolves Internet addresses for network hosts. Domain Name Service is a protocol that is part of the Internet Protocol Suite, and uses UDP. Another mechanism used to resolve Internet addresses is a Hosts file.

## Echo

A computer is said to "echo" if it immediately transmits each character that it receives back to the source. An echo serves as a confirmation of receipt. TCP and UDP use port 7 for echo.

### **Email**

Electronic mail. A method of sending messages to other people via computer networks.

Email is one of the protocols included with the TCP/IP suite of protocols. A popular protocol for sending email is SMTP and a popular protocol for receiving it is POP3.

### **Fileshare**

A file system resource available through a network connection. Fileshare uses UDP ports 137 and 138 and TCP port 139. If you block TCP port 139, no fileshares are allowed.

Using fileshare is acceptable in a trusted office environment, but it is inappropriate for an Internet connection. Allow inbound if you want to receive broadcasts and see people in your "Network Neighborhood." Allow outgoing connections if you want to share another system's resources. Block outbound to the Internet. Block incoming connections unless you want to share your system resources.

### Firewall rule

A set of parameters that defines a type of data packet or network communication to look for, and what to do (permit it or block it) when it is found.

The program provides a set of firewall rules that protects your PC from known attacks by malicious hackers. Using the Live Update feature, you can download the latest firewall rules to protect your system against new forms of attack.

### FTP

File Transfer Protocol. The Internet standard high-level protocol for transferring files from one machine to another over TCP/IP networks. FTP uses ports 20 and 21. FTP is commonly used to download programs and other files to your computer from other servers. It is also used to transfer Web page files.

**FTP Server:** Providing FTP as a service invites hacking attempts. Use the security of your FTP server and

operating system to control access (e.g. usernames, passwords, file access control). In the firewall, you can decide if you can filter by remote IP and allow access only to the local IP

addresses. Block inbound connection attempts unless you have an FTP server.

FTP Client: If you are accessing an FTP server, try to use passive mode. Passive mode FTP allows you to

block incoming FTP connection attempts. Check all downloaded files for viruses.

# GIF

Graphics Interchange Format files, a bit-mapped graphics format used on the World Wide Web.

### HTML

HyperText Markup Language. A standard set of "markup" symbols or codes inserted in a file intended for display on a World Wide Web browser. The markup tells the Web browser how to display a Web page's words and images for the user and defines hypertext links between documents.

### HTTP

HyperText Transport Protocol. A set of rules for exchanging files (text, graphic images, sound, video, and other multimedia files) on the World Wide Web. Requires an HTTP client program on one end, and an HTTP server program on the other end. HTTP is the most important application protocol used in the World Wide Web. HTTP uses TCP port 80.

If you block HTML, you won't be able to surf the web. You may want to allow Java or ActiveX on trusted sites only.

#### **ICMP**

Internet Control Message Protocol. A protocol used by the Internet Protocol to report errors, give limited routing advice, and provide simple low-level services over TCP/IP networks.

ICMP is often used to disrupt IRC Chatgroup users. A malicious user can determine your IP address and then send false ICMP messages to your system which promptly drops your IRC connection. If you use IRC Chat, consider blocking incoming Destination Unreachable messages, as they are frequently used for this purpose.

#### **ICMP Types:**

Echo Reply (ping Time Exceeded reply) (used by Traceroute) Destination Parameter Problem Unreachable Timestamp Request Source Quench Timestamp Reply Redirect Information Request Information Reply Echo Request (ping request) Address Mask Router Request

Advertisement Router Solicitation

#### Identification

A service that provides user information to another system, so they can try to verify your identity. Uses TCP port 113. If you block it, other systems may refuse you their services, such as email.

### Inbound communication

An attempt by an external computer to open a connection to your PC. The connection can be used to send data to and from your PC.

The Rule Assistant alerts you whenever a new type of inbound network communication occurs. You can then specify whether to allow or prohibit the communication, and you can define a firewall rule for that type of communication.

# Inbound packet

A data packet arriving from a remote computer or network.

# Incoming connection

A connection established b	v a remote computer to v	you. This is easily	v identifiable in the TCF	protocol.
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### Internet Protocol (IP)

The essential network protocol by which data is sent from one computer to another on the Internet. It supports TCP, UDP, ICMP and many others. The firewall filters TCP and UDP. IP is a packet-oriented protocol that does not guarantee delivery.

## Internet

A collection of networks and gateways (including the ARPANET, and NSFnet) using the TCP/IP protocol suite and functioning as a single cooperative virtual network.

#### Intranet

A network that uses TCP/IP protocols and other Internet technology within an organization. Especially applied to the use of World Wide Web technology for internal applications.

An intranet is a network of networks that is contained within an enterprise. It may consist of many interlinked local area networks and also use leased lines in the wide area network. Typically, an intranet includes connections through one or more gateway computers to the outside Internet. The main purpose of an intranet is to share company information and computing resources among employees. An intranet can also be used to facilitate working in groups and for teleconferences.

An intranet uses TCP/IP, HTTP, and other Internet protocols and in general looks like a private version of the Internet.

Typically, larger enterprises allow users within their intranet to access the public Internet through firewall servers that have the ability to screen messages in both directions so that company security is maintained.

### IP address

The Internet address, or IP address, is a 32-bit address assigned to hosts using TCP/IP. Most Internet addresses consist of a network portion and a node portion. The address for a host must be unique on the network. When you connect to a web server, for example, you may tell your browser to connect to www.symantec.com, but your computer ultimately has to translate the name to its IP address, 216.32.116.201, before the connection can be made.

### ISP

Internet Service Provider. A company that provides individuals and other companies access to the Internet and other related services such as Web site building and hosting.

# Local (address or port)

Refers to your machine, as opposed to a remote machine.

### Java applet

Java applets are small programs that run in a restricted environment managed by your browser (sometimes referred to as a "sandbox"). Typically Java applets are downloaded to your computer when you visit a Web site. For example, you might download a stock ticker during a visit to a financial Web site.

While the vast majority of Java applets are designed to add functionality to basic HTML-based web pages, in some cases they may have a malicious intent such as password stealing.

## Log

A listing of events related to network activity. The Norton Personal Firewall Event Log, available from the Norton Personal Firewall icon, provides a detailed event history.

## Modem

Device that carries a data signal, typically over a telephone or ISDN line.

## Name resolution

The process of mapping a domain name into the corresponding  $\ensuremath{\mathsf{IP}}$  address.

## NetBEUI

Short for NetBIOS Extended User Interface. The implementation of the NetBIOS transport protocol available with the Client for Microsoft Networks. This local-area protocol operates underneath the NetBIOS interface and lets computers communicate within a local area network.

The default firewall rules allow inbound and outbound NetBIOS.

## NetBIOS

Short for Network Basic Input Output System, an application programming interface (API). An interface specification for PC local area networks used with the Client for Microsoft Networks and other LANs. Application programs use NetBIOS for client/server or peer-to-peer communications in support of file and print shares.

This protocol can be carried over TCP and UDP.

## **Network address**

The network portion of an IP address. Most IP addresses have a network portion and a node portion.

#### Non-listening server port

When a service (server program) initially is started, it "binds" to a designated port number, which it then uses for network communication. If no service is bound to the port number that a client attempts to connect to, then the client is requesting a connection to a "non-listening server port." In other words, the client is attempting to connect to a server that is not running.

If the Norton Firewall Rule Assistant is enabled, you will be alerted about inbound UDP and TCP communication attempting to connect to a non-listening server port.

## NTP

Network Time Protocol. A service that supplies the time. Uses port 123.

Allowing access for this protocol has potential risk if your system has time-sensitive services or applications and it uses the time that is supplied.

## NTTP

Network News Transfer Protocol used for managing the notes posted on Usenet newsgroups. The NNTP client may is included as part of your Netscape, Internet Explorer, Opera, or other Web browser or you may use a separate client program called a newsreader. Allow inbound connections only if you are running a news server.

#### **Outbound communication**

An attempt by your PC to open a connection with an external computer. The connection can be used to send data to and from your PC.

The Rule Assistant alerts you whenever a new type of outbound network communication occurs. You can then specify whether to allow or prohibit the communication, and you can define a firewall rule for that type of communication.

#### **Packet**

A packet is the unit of data that is routed between an origin and a destination on the Internet. A packet contains information that enables computers on a network to determine whether to receive it, in addition to the data being transmitted.

When any file (email message, HTML file, GIF file, URL request, and so forth) is sent from one place to another on the Internet, the Transport Control Protocol (TCP) layer of TCP/IP divides the file into chunks (packets). Each of these packets includes the Internet address of the destination. The individual packets for a given file may travel different routes through the Internet; when they have all arrived, they are reassembled into the original file (by the TCP layer at the receiving end).

# Permit/Block (rules)

The action taken if a packet matches a rule. Block means the packet is not sent/received. Permit means it is sent/received.

#### **Personal Firewall**

The Personal Firewall prevents outsiders from accessing your own private data resources and controls what outside resources its own users have access to. To do this, the Personal Firewall filters all network packets to determine whether to forward them toward their destination.

## POP3

Post Office Protocol, version 3. which is used to transfer email. Uses TCP port 110.

Risks related to email are the spreading of viruses in files that are attached, and 'spam', the junk-mail of the Internet. Allow inbound connections if you are running a POP3 mail server.

#### Port

A "logical connection" place. A transport user identification used by a client program to specify a particular server program on a computer. Higher-level applications that use TCP/IP, such as the web protocol HTTP, have ports with preassigned numbers. Other application processes are given port numbers dynamically for each connection. When a service (server program) initially is started, it is said to bind to its designated port number. As any client program wants to use that server, it also must request to bind to the designated port number.

See also non-listening port.

#### Port number

Each TCP/IP application program has unique port numbers associated with it. The port number identifies the logical communications channel that is to be used by this application. Some protocols, use a well known port (for example, HTTP uses port 80) though this too can be configurable. Port numbers are always used in conjunction with IP addresses when establishing connections to host computers.

The host computer may be running both an HTTP server and an FTP server. If you're connecting to the host computer using a web browser, you'll want to connect to the HTTP server and not the FTP server. Since HTTP servers usually listen on port number 80, and FTP servers usually listen on port number 21, the web browser will connect to the correct server on the www.symantec.com computer if it connects to port 80.

#### Protocol

A protocol is the special set of rules for communicating that the end points in a connection use when they send signals back and forth. Both end points must recognize and observe the protocol.

On the Internet, there are the TCP/IP protocols, consisting of:

- TCP (Transmission Control Protocol), which uses a set of rules to exchange messages with other Internet points at the information packet level.
- IP (Internet Protocol), which uses a set of rules to send and receive messages at the Internet address level.
- HTTP, FTP, and other protocols, each with defined sets of rules.

## Proxy

A mechanism allowing one system to "front" for another system when responding to protocol requests. Security applications in firewalls use proxy services to screen the secured network from users on the Internet.

#### **Proxy server**

A server that acts as an intermediary between a workstation user and the Internet so that the enterprise can ensure security, administrative control, and caching service. A proxy server is associated with or part of a gateway server (separating the enterprise network from the outside network) and a firewall server (protecting the enterprise network from outside intrusion).

A proxy server receives a request for an Internet service (such as a Web page request) from a user. If the proxy server is also a cache server, it can use its local cache of previously downloaded Web pages, to provide the page without forwarding the request to the Internet. If the page is not in the cache, the proxy server, uses one of its own IP addresses to request the page from the server out on the Internet. When the page is returned, the proxy server relates it to the original request and forwards it on to the user.

To the user, all Internet requests and returned responses appear to be directly with the addressed Internet server. The proxy IP address has to be specified as a configuration option to the browser or other protocol program.

## RAS

Remote Access Service, support for dialup connections.

Remote access is the ability to get access to a computer or a network from a remote distance. A remote access server is the computer and associated software that is set up to handle users seeking access to network remotely. Sometimes called a communication server, a remote access server usually includes or is associated with a firewall server to ensure security and a router that can forward the remote access request to another part of the corporate network.

#### Referer field

Referer fields are used to provide "third-party" sites with information about the site that triggered a request for data from their server. Referer fields allow web servers to know where you've just been, which is information that you might prefer to keep to yourself.

For example, a web page may present an advertisement by including instructions for the browser to request the advertisement from a third-party site. As part of your browser's request for the advertisement, it provides the advertising site information about the site you visited that triggered the request. This information is passed in a referer field in the "HTTP GET" header (which the browser uses to make the request).

When you choose to block referer fields, information about what page you are currently viewing is not passed on. When your browser connects to a new web server, it appears that you just typed the URL into your browser or selected it from your bookmarks.

#### **Rule Assistant**

The Rule Assistant provides an interactive learning mode in which the program automatically prompts for your input and creates rules that permit or block network communication based on the way you use software on your PC.

When the Rule Assistant is enabled, you are prompted for input whenever an application on the PC attempts to make a new type of network communication. Based on your response, the program permits or blocks the network communication and may create a firewall rule that applies to all future attempts to perform this type of network communication.

#### Services

Services are protocols that are used to allow one computer to access a particular kind of data stored in another computer. Many host computers that are connected to the Internet offer services. For example, HTTP servers use the HyperText Transfer Protocol to provide World Wide Web service, FTP servers offer File Transfer Protocol services, SMTP servers use the Simple Mail Transport Protocol to send mail, and POP servers use the Post Office Protocol to retrieve mail.

## Services file

A text file that lists the port number of network services available to Windows sockets applications.

## SMTP

Simple Mail Transfer Protocol. A TCP/IP protocol governing electronic mail transmission and reception. This is one of the most popular email services. Uses TCP/IP port 25. Risks related to email are the spreading of viruses in files that are attached, and 'spam', the junk-mail of the Internet.

Allow inbound connections only if you are running an SMTP mail server. Allow outbound to your SMTP mail server.

#### SOCKS

A mechanism by which a secure proxy data channel can be established between two computers in a client/server environment.

SOCKS is a protocol that a proxy server can use to accept requests from client users in a company's network so that it can forward them across the Internet. Socks uses sockets to represent and keep track of individual connections. The client side of Socks is built into certain Web browsers and the server side can be added to a proxy server.

A socks server handles requests from clients inside a company's firewall and either allows or rejects connection requests, based on the requested Internet destination or user identification. Once a connection and a subsequent "bind" request have been set up, the flow of information exchange follows the usual protocol (for example, the Web's HTTP protocol).

## **Subscription content**

If your subscription content is current, you can use Symantec's Live Update feature to obtain content updates for Norton Personal Firewall. Content updates include new rules for the Personal Firewall that protect you from the latest forms of Internet-based attacks.

## TCP

Transmission Control Protocol. The Internet standard transport-level protocol, providing reliable, full duplex, stream service. Software implementing TCP usually resides in the operating system and uses the IP protocol to transmit information across the Internet.

Examples of TCP-based applications and services are FTP, web browsing, email and IRC.

#### TCP/IP

Transport Control Protocol/Internet Protocol. Generally refers to the Internet Protocol Suite, which includes TCP and IP, as well as several other protocols, used by computers to communicate with each other. TCP/IP is the standard protocol used on the Internet. It can also be used as a communications protocol in the private networks called intranets and in extranets.

TCP/IP is a two-layered program. The higher layer, Transmission Control Protocol, manages the assembling of a message or file into smaller packets that are transmitted over the Internet and received by a TCP layer that reassembles the packets into the original message. The lower layer, Internet Protocol, handles the address part of each packet so that it gets to the right destination.

#### Telnet

Telnet is a TCP-based service that supports remote logins (usually to UNIX systems). Telnet uses port 23.

With Telnet, you log on as a regular user with whatever privileges you may have been granted to the specific applications and data on that computer. Telnet is most likely to be used by program developers and anyone who has a need to use specific applications or data located at a particular host computer. Telnet has the risk of that you are sending your username and password over a network, which may be stolen by someone and used to break in.

## UDP

User Datagram Protocol. A transport layer in TCP/IP networks. UDP is a low-overhead protocol that uses IP to deliver its packets.

Examples of services and applications that use UDP are DNS, NetBIOS (for broadcasts etc.).

## URL

Abbreviation of Uniform Resource Locator, the global address of documents and other resources on the World Wide Web.

The first part of the address indicates what protocol to use, and the second part specifies the IP address or the domain name where the resource is located.

A sample URL is http://www.symantec.com/index.html, where http is the protocol, www.symantec.com is the domain name, and index.html is the document.

#### Web browser

A software application used to make navigating the Internet easy for the user by providing a graphical user interface so the user can click menus, icons, or buttons rather than learning difficult computer commands. Also called a web client because the browser application resides on the client, or the computer of the individual using it, rather than residing on a web server.

Two widely used web browsers are Microsoft's Internet Explorer and Netscape Navigator.

# Web page

A single document on the World Wide Web that is specified by a unique address or URL and that contains text, hyperlinks, and graphics.

## Web server

Computer where web pages are stored and accessed by others using web client software, or the computer software that allows the user to access the web pages.

## Web site

A group of similar web pages linked by hyperlinks and managed by a single company, organization, or individual. A Web site may include text, graphics, audio and video files, and hyperlinks to other web pages.

#### World Wide Web

The World Wide Web (WWW or simply Web) is all the resources and users on the Internet that are using the Hypertext Transport Protocol (HTTP). The Web gives universal access to a vast collection of documents. The Web's protocols are a superset of many of the most common Internet application services. Web servers exist for libraries, corporations, and a wide variety of other sites.

## Port and service assignments

When displaying messages about connections, Norton Internet Security uses the port and service assignments listed in your PC's Services file (if present) and those in the following table. (The Services file is a text file located in your Windows directory.)

Service	Port Number	Description
<u>http</u>	80	HTTP
<u>www</u>	80	HTTP
www-http	80	HTTP
http-alt	800	HTTP
http-alt-1	8008	HTTP
http-proxy	8080	Often used as HTTP proxy
http-proxy-1	8088	Often used as HTTP proxy
http-mgmt	280	HTTP management
https	443	HTTP server
gss-http	488	HTTP misc
fmpro-http	591	HTTP misc
ftp-data	20	File Transfer
<u>ftp</u>	21	File Transfer
http-rpc-epmap	593	HTTP misc
bootps	67	Bootstrap Protocol Server
bootpc	68	Bootstrap Protocol Client
dcom	135	Microsoft RPC end point to end point mapping
ldap	389	Lightweight Directory Access Protocol
video	458	Connectix and Quick Time Streaming protocols
video-1	545	Connectix and Quick Time Streaming protocols
rtsp	554	Real Time Stream Protocol
mountd	709	NFS mount daemon
pcnfsd	721	PC NFS Daemon
irc	194	Internet Relay Chat protocol
irc-serv	529	Internet Relay Chat protocol
ircs	994	Internet Relay Chat protocol
ircu	6665	Internet Relay Chat protocol
ircu-1	6666	Internet Relay Chat protocol
ircu-2	6667	Internet Relay Chat protocol
ircu-3	6668	Internet Relay Chat protocol
ircu-4	6669	Internet Relay Chat protocol
socks	1080	Socks
lotusnote	1352	Lotus
ms-sql-s	1433	Microsoft misc
ms_sql-m	1434	Microsoft misc
ms-sna-server	1477	Microsoft misc
ms-sna-base	1478	Microsoft misc
orasrv	1525	Oracle
tdisrv	1527	Oracle
coauthor	1529	Oracle

nsvt	1537	HP's NSVT native protocol
nsvt-stream	1570	HP's NSVT TCP stream mode
remote-winsock	1745	Remote Winsock Proxy
netshow	1755	Microsoft's NetShow
SMTP	25	Simple Mail Transfer
telnet	23	Telnet
Pop3	110	Post Office Protocol
icq	4000	ICQ chat program
aol	5190	America Online
aol-1		
	5191	America Online
aol-2	5192	America Online
aol-3	5193	America Online
aol-4	11523	America Online
Back-Orifice	31337	Back Orifice
NetBus	12345	Netbus
NetBus-2	12346	Netbus2
pc-anywhere-data	5631	pcAnywhere data port
pc-anywhere-status	5632	pcAnywhere status port
xserver	6000	X Server
vdolive	7000	VDOLive Player
msbd	7007	Microsoft MSBD (related to NetShow)
realaudio	7070	Real Networks Real Audio
quake	26000	Quake server game
quake2	27910	Quake2 server game
quake2-2	27911	Quake2 server game
•		Ç

### To safeguard the privacy of family members

Norton Personal Firewall lets you block the sending of confidential data over the web. For example, you could prevent your address and phone number from being entered in web registration forms.

**Note:** This feature only blocks unsecured web data (HTTP). It does not block data sent through secured web pages (HTTPS), chat, email, or other types of Internet services.

### To block the sending of information over the web:

- 1 Click **Privacy** on the left side of the window.
- 2 Click Enable Privacy.
- 3 Click Custom Level.
- 4 Select **High** as the setting for Confidential Information and then close the Custom Privacy Settings dialog box.
- 5 Click Confidential Info.
- 6 Click Add and then enter the data you want to block.

  Because Norton Personal Firewall blocks only the exact character sequence you enter (including spaces, dashes, and other special characters), you may need to enter the confidential data in several forms.

Click here {button ,AL("About the Privacy window;Norton Internet Security overview;Restricting Access to Internet Applications;technical support;Understanding Internet-based risks and threats",0,'','')} for more information.

### Working with a proxy server

Your PC may connect to the Internet through a proxy server, which causes all HTTP communication to go through the port used by the proxy server. If HTTP communication is conducted through a non-standard port, you should add the port to the Port List.

### Choose an item for more information:

How to determine whether Norton Internet Security is working with your proxy server

How to determine what port to monitor for HTTP communication

### To determine whether Norton Personal Firewall works with your proxy server:

Check Norton Personal Firewall Statistics to see if Norton Internet Security is doing HTTP filtering.

- 1 Click **Options** in the Norton Personal Firewall toolbar.
- 2 Click Personal Firewall.
- 3 Click View Statistics.
- 4 In the Web category, look at the Bytes Processed counter.
- 5 Use your browser to connect to a Web site.
- **6** If Norton Internet Security is filtering, the Bytes Processed counter in the Statistics window should increase as you access web pages.

Click here {button ,AL("proxy config",0,",")} for more information.

### To determine what port to monitor for HTTP communication:

- 1 Make a connection to a Web site.
- 2 In the Event Log, click the Connections tab.
- 3 Look at the information in the Remote column.

There should be a port number next to the IP address of the site you accessed with your browser. This number is the port number that was used to access your proxy server for your web connection.

- 4 Norton Personal Firewall needs to perform filtering on this port number. You might need to add the port number to the list of ports that are filtered.
  - a Open the Other tab in the Advanced Options dialog box.
  - **b** Click Add to add a port number to the list.

Click here {button ,AL("proxy config",0,",")} for more information.

### To enable Automatic Firewall Rule Creation:

- 1 Open the Advanced Options dialog box and click the Other tab.
- 2 On the Other tab, click the **Enable Automatic Firewall Rule Creation** check box.

When Enable Automatic Firewall Rule Creation is enabled, the program will automatically create a new firewall rule for applications it knows about. If this option is not checked, you will be prompted to create the rule when the application is run.

Click here {button ,AL("firewall faq",0,`',`')} for more information.

### To add a firewall rule:

You can maintain a list of firewall rules that specify what types of network communications are permitted with this PC.

- 1 Open the Advanced Options dialog box.
- 2 On the Firewall tab, click Add.
  - Use options in the Add Firewall Rule dialog box to specify the network communication rule.
- 3 To move a rule in the firewall list order, click it and then use the up arrow or down arrow button to change its location in the order.

Click here {button ,AL("firewall faq",0,'','')} for more information.

# To change a firewall rule:

- 1 Open the <u>Advanced Options</u> dialog box and click the **Firewall** tab.
- 2 In the Firewall Rule list, click the rule you want to modify.
- 3 Click **Modify**, and then use options in the Modify Firewall Rule dialog box to make desired changes.

Click here {button ,AL("firewall faq",0,'','')} for more information.

## To remove a firewall rule:

- 1 Open the <u>Advanced Options</u> dialog box and click the **Firewall** tab.
- 2 In the Firewall Rule list, click the rule you want to remove.
- 3 Click Remove.

Click here {button ,AL("firewall faq",0,'','')} for more information.

## To temporarily disable a firewall rule:

- 1 Open the Advanced Options dialog box and click the Firewall tab.
- 2 In the list of rules, a check mark next to the rule specifies whether or not the rule is currently in effect. To temporarily disable a rule, uncheck it.
- 3 To permanently disable a rule, remove it from the list (click the rule and then click Remove).
  Norton Internet Security will ignore all firewall rules if Security is not enabled.

Click here {button ,AL("firewall faq",0,`',`')} for more information.

### To test the firewall:

- 1 Open the Advanced Options dialog box.
- 2 On the Firewall tab, click **Test**.
- 3 In the Test Firewall dialog box, you can test whether a specified type of network communication would be permitted or would be blocked by existing firewall rules.

You do not have to enable the firewall in order to test the firewall rules.

Click here {button ,AL("firewall faq",0,`',`')} for more information.

#### To change the order in which firewall rules are processed:

- 1 Open the Advanced Options dialog box and click the Firewall tab.
- 2 In the Firewall Rule list, click the rule you want to move, and then use the up arrow or down arrow button to change its location in the order.

#### **Tips**

- When the firewall is enabled, the rules in the firewall rules list are processed in the order in which they are listed.
- Once a Block or Permit rule is matched, all remaining rules are ignored. In other words, additional rules that match this type of communication are ignored if they appear below the first rule that matches.
- If an Ignore rule is matched, the type of communication that was attempted is logged to the firewall event log and then the rule processing continues until another match occurs. If there is no match, the communication is either blocked by default or the Rule Assistant is invoked.
- For an Ignore rule to work effectively, it must appear in the firewall rule list above any related Permit or Block rule for that type of communication. It's a good idea to move all Ignore rules to the top of the firewall rule list.

Click here {button ,AL("firewall faq",0,",")} for more information.

# To view the Norton Personal Firewall Event Log:

- 1 On the toolbar, click **Options**.
- 2 Click Personal Firewall.
- 4 Click View Event Log.

Click here {button ,AL("About the Security window;Norton Internet Security overview;Restricting Access to Internet Applications;technical support;Understanding Internet-based risks and threats",0,`',`')} for more information.

## To filter the types of events displayed on the Event Log System tab:

To the right of the System tab in the Event Log viewer, you will see several event types: Error, Warning, Information, Alert and System. Click the check box next to each event type you want to include in the Event Log viewer display. If an event type is not checked, its events will not be displayed.

Click here {button ,AL("Configure",0,`',`')} for more information.

# To adjust the width of a column:

- 1 In the Event Log viewer, point to the boundary line on the right side of the column heading. The cursor changes from a pointer to a cross-hair.
- 2 Drag the boundary line to the desired width.

Click here {button ,AL("Display;Window",0,`',`')} for more information.

## To refresh the displayed events:

In the Event Log viewer, click **Refresh** to update the current tab display with any new events that have been logged.

By default, the data displayed in a tab refreshes automatically when you switch to that tab in the Event Log viewer.

## To clear the events from all event logs:

On the Log menu, click **Clear All Tabs** to clear the events displayed on every tab in the Event Log viewer. This clears the individual event log file maintained for each tab's event category. After a log is cleared, new events are recorded at the beginning of the log.

### To clear the events on the current tab:

On the Log menu, click **Clear Tab** to clear the events displayed on the current tab.

This clears the event log file maintained for the event category shown on the tab. After the log is cleared, new events are recorded at the beginning of the log.

## To automatically clear the events on all tabs when you stop Norton Internet Security:

On the Log menu, click **Clear All Tabs Upon Logoff** to automatically clear the contents of every event log file each time the program is stopped. If Clear All Tabs Upon Logoff is already checked, you do not need to do anything.

# To print log information:

- 1 Click the tab containing the information you want to print.
- 2 On the Log menu, click **Print Tab**.

# To save log information as a text file:

- 1 Click the tab containing the information you want to save.
- 2 On the Log menu, click Save Tab As.
- **3** Specify a location and name for the text file.

Click here {button ,AL("Log File",0,`',`")} for more information.

# To copy text from the Event Log viewer:

- **1** Select the text you want to copy.
- 2 On the Edit menu, click **Copy**. This copies the selected text to the Clipboard.
- 3 Use the Paste command of another application to add this text to a file.

Click here {button ,AL("Log File",0,`',`")} for more information.

## To configure the size of an event log file:

- 1 Click the tab containing the log you want to configure.
- 2 On the Log menu, click Change Log File Size.
- 3 In the Size box, select the file size you want.

This sets the maximum size for the event log file. When the event log file reaches its maximum, new events wrap to the beginning of the file.

You must restart your PC in order for the new log file size to be enforced. Changing the size of the log file causes the log to be cleared.

# To keep the Statistics window visible at all times:

On the View menu in the Statistics window, click **Always On Top**.

This ensures that the Statistics window is always visible, even when you run a program in a full screen.

### To configure the statistics categories for the Statistics window:

- 1 On the View menu in the Statistics window, click **Options**.
- 2 The Statistics Options dialog box lists all of the category counters that you can display in the Statistics window.
- 3 You can do one of the following from here:
- 0
- To include a category of counters in the Statistics window, click the check box next to that category. To exclude a category of counters in the Statistics window, uncheck the check box next to that category. 0

Click here {button ,AL("Display in stats",0,`',`')} for more information.

## To configure the column display in the Statistics window:

- On the View menu in the Statistic window, point to columns and click one of the following options: **Automatic**: When you resize the Statistics window, automatically adjusts between a one and two column display, based on current window width.
- One: Counters are always displayed in a single column within the Statistics window.
- Two: Counters are always displayed in two columns within the Statistics window.

Click here {button ,AL("Display in stats",0,",")} for more information.

## To reset counters in the Statistics window:

On the View menu in the Statistics window, click Reset Values.

Click here {button ,AL("Display in stats",0,`',`')} for more information.

## To save statistics to a text file:

- 1 On the File menu in the Statistics window, click **Save**.
- 2 Specify a location and name for the text file.

# To print current statistics information:

On the File menu in the Statistic window, click Print.

# To open the Statistics Options dialog box:

On the View menu in the Statistics window, click Options.

# To access Norton Personal Firewall Advanced Options:

- 1 On the toolbar, click **Options**.
- 2 Click Personal Firewall.
- 4 Click Advanced Options.

The Advanced Options dialog box is displayed.

# To see what privacy rules are in effect at a site:

- 1 Open the <u>Advanced Options</u> dialog box.
- 2 Click the Web tab.
- 3 Click the site in the site list (left pane). If the **Use These Rules For <site>** check box is unchecked, a message appears next to each option on the Privacy tab indicating how the program is determining what Privacy rules to use.

### To set up default settings for privacy rules:

You can configure the program so that it uses a set of default privacy rules at all sites for which no site-specific or domain-specific privacy rules are defined.

### To set up default privacy rules:

- 1 Open the Advanced Options dialog box.
- 2 Click the Web tab.
- 3 In the site list in the left pane, click (Defaults).
- 4 Use options on the Privacy tab to specify default rules for **Cookies**, and for Browsing Privacy (the HTTP Header fields): **Referer**, **Browser** (**User-agent**), and **E-mail** (**From**).

The Program uses privacy rules from (Defaults) when no site-specific or domain-specific privacy rules are defined and the Cookie Assistant disabled.

Click here {button ,AL("Privacy tab",0,'','')} for more information.

#### To create privacy rules for a specific Web site:

You can configure site-specific privacy rules for the program to use whenever you visit a particular Web site.

### To set up site-specific privacy rules:

- 1 Open the Advanced Options dialog box.
- 2 Click the Web tab.
- 3 In the site list in the left pane, click the site that you want to work with.
- 4 Click the Use These Rules For <site> check box.
- 5 Use options on the Privacy tab to specify site-specific rules for **Cookies**, and for Browsing Privacy (the HTTP Header fields): **Referer**, **Browser** (**User-agent**), and **E-mail** (**From**).

#### **Tips**

- The program ignores all privacy rules if Privacy is not enabled.
- When the privacy filter is enabled and the Use These Rules For <site> check box is checked, the program will use the site's privacy rule settings whenever you visit the current site.
- If the Use These Rules For <site> check box is unchecked, a message appears next to each option on the Privacy tab indicating how the program is determining what Privacy rules to use.

## To add a site or domain to the list of sites configured for web filtering:

- 1 Open the Advanced Options dialog box.
- 2 Click the Web tab.
- 3 On the left pane, click Add Site.
- 4 Do one of the following:
- To create web filtering rules that apply to a specific Web site, enter the Web site name. For example, enter www.symantec.com.
- To create web filtering rules that apply to all servers within a domain, enter the domain name. For example, enter symantec.com.

The new site or domain name is added to the site list displayed in the left pane on the Web tab.

### To create active content rules for a specific Web site:

You can configure site-specific active content rules for the program to use whenever you visit that site.

### To set up site-specific active content rules:

- 1 Open the Advanced Options dialog box.
- 2 Click the Web tab.
- 3 Click the Active Content tab.
- 4 In the site list in the left pane, click the site that you want to work with.
- 5 Click the Use These Rules For <site> check box.
- 6 Specify site-specific rules to handle Java and ActiveX content and to control animated images.

Click here {button ,AL("Active Content tab",0,'','')} for more information.

## To specify default settings for active content rules:

You can configure the program so that it uses a set of default active content rules at all sites for which no site-specific or domain-specific active content rules are defined.

### To set up default active content rules:

- 1 Open the Advanced Options dialog box.
- 2 Click the Web tab.
- 3 Click the Active Content tab.
- 4 In the site list in the left pane, click (Defaults).
- **5** Use options on the Active Content tab to specify default rules to handle Java and ActiveX content and to control animated images.

Norton Internet Security uses active content rules from (Defaults) when no site-specific or domain-specific active content rules are defined and the Java/ActiveX Assistant is not enabled.

Click here {button ,AL("Active Content tab",0,`',`')} for more information.

## To create privacy rules for web servers within a domain:

You can configure domain-specific privacy rules for the program to use whenever you visit any site within the specified domain. To set up domain-specific privacy rules:

- 1 Open the Advanced Options dialog box.
- 2 Click the Web tab.
- 3 Click the **Privacy** tab.
- 4 In the site list in the left pane, click the domain that you want to work with.
- 5 Click the Use These Rules For <domain> check box.
- **6** Use options on the Privacy tab to specify domain-specific rules for **Cookies**, and for Browsing Privacy (the HTTP Header fields): **Referer**, **Browser (User-agent)**, and **E-mail (From)**.

Click here {button ,AL("Privacy tab",0,`',`')} for more information.

# To change web settings for a site:

- 1 Open the <u>Advanced Option</u> dialog box.
- 2 Click the Web tab.
- 3 In the site list in the left pane, click the site name.
  - The settings shown on the tabs in the right pane apply to the site that is currently selected in the site list (in the left pane).
- 4 Click the tab in the right pane to make its controls visible.
- 5 Modify any web settings for the site, then click **Apply** to put the changes into effect.

Click here {button ,AL("Managing block list",0,`',`')} for more information.

## To remove a site or domain from the list of sites configured for web filtering:

To remove a site name or domain name from the site list in the left pane on the **Web** tab, click it in the list and then click **Remove Site**. Norton Personal Firewall prompts for confirmation before it removes the entry.

Removing a domain does not remove any site entries that are beneath that domain. If you remove a domain, all of the site entries beneath that domain are "promoted" within the site list hierarchy to become second-level entries.

When a site or domain is removed, the site-specific or domain-specific privacy and active content settings are discarded.

Click here {button ,AL("Managing block list",0,`',`')} for more information.

# To view or modify firewall rules:

- 1 On the toolbar, click **Options**.
- 2 Click Personal Firewall.
- 3 Click Advanced Options.
- 4 Click Firewall.

Click here {button ,AL("About the Security window;Norton Internet Security overview;Restricting Access to Internet Applications;technical support;Understanding Internet-based risks and threats",0,`',`')} for more information.

## To manually add the default ICMP firewall rules:

ICMP filtering will not be activated until you manually add an ICMP firewall rule as described:

- 1 Open the Advanced Options dialog box and click the Firewall tab.
- 2 On the Firewall tab, click Add.
- 3 Create an outbound ICMP rule. In the Add Firewall Rule dialog box, fill in the following:

Name: Default Outbound ICMP

Action: Permit

Direction: Outbound Protocol: ICMP

- 4 Then, on the Type tab click **Any Type**.
- 5 Click OK to add the rule.
- 6 Create an inbound ICMP rule. In the Add Firewall Rule dialog box, fill in the following:

Name: Default Outbound ICMP

Action: Permit

Direction: Outbound

Protocol: ICMP

- 7 On the Type tab click **Any Type**.
- 8 Click **OK** to add the rule.

# To open the Add Firewall Rule dialog box:

- $\textbf{1} \quad \text{Open the } \underline{\text{Advanced Options}} \text{ dialog box and click the } \textbf{Firewall } \text{tab}.$
- 2 On the Firewall tab, click **Add**.

# To access the Application tab in the Add Firewall Rule dialog box:

- 1 Open the <u>Advanced Options</u> dialog box.
- 2 Click the Firewall tab.
- 3 Click Add for a new rule or click an existing rule and click Modify.
- 4 In the Protocol box, click any item except **ICMP**.
- 5 Click the **Application** tab.

# To access the Type tab in the Add Firewall Rule dialog box:

- 1 Open the <u>Advanced Options</u> dialog box.
- 2 Click the Firewall tab.
- 3 Click Add for a new rule or click an existing rule and click Modify.
- 4 In the Protocol box, click ICMP.
- 5 Click the **Type** tab.

# To access the Service tab in the Add Firewall Rule dialog box:

- 1 Open the <u>Advanced Options</u> dialog box.
- 2 Click the Firewall tab.
- 3 Click Add for a new rule or click an existing rule and click Modify.
- 4 In the Protocol box, click any item except **ICMP**.
- 5 Click the **Service** tab.

# To access the Address tab in the Add Firewall Rule dialog box:

- $\textbf{1} \quad \text{Open the } \underline{\text{Advanced Options}} \text{ dialog box}.$
- 2 Click the Firewall tab.
- 3 Click Add for a new rule or click an existing rule and click Modify.
- 4 Click the Address tab.

# To access the Logging tab in the Add Firewall Rule dialog box:

- $\textbf{1} \quad \text{Open the } \underline{\text{Advanced Options}} \text{ dialog box}.$
- 2 Click the Firewall tab.
- 3 Click Add for a new rule or click an existing rule and click Modify.
- 4 Click the **Logging** tab.

### To specify which ports to monitor for HTTP communication:

- 1 Open the Advanced Options dialog box.
- 2 Click the Other tab.
- 3 Do any of the following:
- To add a port to the HTTP Port List: Click **Add**, then enter the number of the port that you want the the program to monitor for HTTP communication.
- To remove a port from the HTTP Port List: Click the port number in the **HTTP Port List**, then click **Remove**.

#### Tips

- Network services (such as HTTP or FTP) use specific ports on your PC. For example, HTTP communication is usually conducted through port 80. The program filters all HTTP communication sent and received through the ports in the **HTTP Port List**, applying the blocking options that you have enabled.
- Your PC may connect to the Internet through a proxy server, which causes all HTTP communication to go through the port used by the proxy server. Or you may use an application that performs HTTP communication through a non-standard port. If HTTP communication is conducted through a non-standard port or a proxy server, you should add the port to the **HTTP Port List**.

### **Introducing Norton Personal Firewall**

Norton Personal Firewall provides your PC with comprehensive protection from Internet-based threats and lets you create a safe, supervised environment for those who use the web.

### Using Norton Personal Firewall, you can:

- Set up a <u>personal firewall</u> that protects your PC and data from curious intruders, malicious hackers, and attacks by rogue Web sites.
- Prevent you from giving out confidential information to Web sites you visit.
- Reduce the risks to your privacy by blocking cookies and referer fields when you visit Web sites.

Click here {button ,AL("About the Privacy window;About the Security window;About the Status window;technical support;Understanding Internet-based risks and threats",0,`',`')} for more information.

## Understanding Internet-based risks and threats

Although the vast majority of the Internet is safe to visit, there are some areas of cyberspace that pose potential security and privacy risks.

Using Norton Personal Firewall, you can protect yourself and your family from the following Internet-based threats:

- Viruses: The threat of receiving infected files over the Internet is very real. Infected files can be downloaded from Web sites, instant messaging programs, email attachments, or by other means.
- Malicious active content: Web pages can run ActiveX controls on your PC without your knowledge or permission. If used maliciously, ActiveX controls can allow a hacker to ransack the contents of your hard disk, delete files, or steal passwords.
- Trojan horses: These programs are typically copied to your PC through email attachments, pushed content, or browser plug-ins. Once on your machine, a Trojan horse can take control of your PC for the purpose of stealing passwords or making your files available to the outside world.

Click here {button ,AL("About the Privacy window;About the Security window;About the Status window;Norton Personal Firewall overview;technical support",0,'','')} for more information.

## **Product Support Online**

These options give you access to product support online, as well as additional information about Norton Personal Firewall and security in general.

- Technical Support is available online at <a href="http://www.symantec.com/techsupp/">http://www.symantec.com/techsupp/</a>. Use this link to open the site in your default web browser. Then select Norton Personal Firewall in the product list.
- The Norton Personal Firewall User's Guide is included on the product CD in Adobe Acrobat format. The Adobe Acrobat Reader is also located on the CD. The guides and the reader are located in the \Manuals folder on the CD. Adobe Acrobat Reader is also available at <a href="http://www.adobe.com/">http://www.adobe.com/</a>.
- The Norton Personal Firewall website includes general security information not covered in the User's Guide or online help. To open the site, click **Visit the Norton Internet Security Website** from the Help menu.

Click here {button ,AL("About the Status window;Understanding Internet-based risks and threats",0,'','')} for more information.

# **Updating Norton Personal Firewall with LiveUpdate**

Symantec's LiveUpdate feature lets you obtain software updates and subscription content, including updates to the new firewall rules that protect your PC from the latest Internet security threats.

**Note:** To obtain subscription content, your Norton Personal Firewall subscription must be current. Check the Status window if you are unsure about the status of your subscription. If your subscription has expired, you can renew your subscription using LiveUpdate.

Click here {button ,AL("About the Status window;technical support;Understanding Internet-based risks and threats",0,`',`')} for more information.

### **About the Status window**

From the Status window you can:

- Click Disable to temporarily suspend all forms of Norton Personal Firewall protection.
- Click individual protection services (Security or Privacy) to temporarily suspend protection features.
- View real-time statistics that indicate how Norton Personal Firewall is protecting your system. For a detailed account of protection activity, click the individual statistics associated with each service. To reset the statistics, right-click an empty area in the Status window.
- Check the expiration period of Norton Personal Firewall's subscription content.

Click here {button ,AL("About the Privacy window;About the Security window;About the Status window;Norton Internet Security overview;technical support",0,`',`')} for more information.

#### **About the Security window**

In the Security window you can view, modify, and enable Internet security settings.

The Security Level slider control provides three Security settings:

- High: Configures the <u>Personal Firewall</u> so that all the applications on your PC are prevented from connecting to the network unless they have been approved to do so. You will also be given the option to run or cancel <u>Java Applets</u> and <u>ActiveX controls</u> whenever they are run.
- Medium: Configures the Personal Firewall so that all the applications on your PC are allowed to access the network unless the application appears to behave like a known malicious program. (The Medium setting compares the application to a large list of malicious programs.) Java Applets and ActiveX controls are run normally.
- Minimal: Configures the Personal Firewall so that all the applications on your PC can access the network unless the application appears to be malicious. (The Minimal setting compares the application to a small list of programs known to be malicious.) Java Applets and ActiveX controls are run normally.

The default setting is Medium. It provides a good balance between security benefits and issues of convenience and performance.

To control specific Security settings, click **Custom Level**. If you change the Security settings and want to revert to the original settings, click **Default Level**.

Click here {button ,AL("Norton Internet Security overview;Safeguarding the privacy of family members;technical support;To view the Norton Internet Security log file;Understanding Internet-based risks and threats",0,'','')} for more information.

# **Notice**

Norton Personal Firewall has notified you that you are attempting to run a Privacy feature that requires Security to be enabled. To ensure that Norton Personal Firewall is correctly configured to safeguard your PC, click **Security** in the Status window or disable the Privacy feature described in the notice.

## **Customize Security Settings dialog box**

This dialog box lets you create a customized level of security.

- Personal Firewall: Specifies how the program's firewall rules are applied.
- Java Applet Security: Lets you to control how the browser handles <u>Java applets</u> when they are downloaded from Web sites. (Blocking Java applets may prevent some web pages from working properly.)
- ActiveX Control Security: Lets you control how the browser handles <u>ActiveX controls</u> when they are encountered on the Internet. (Blocking ActiveX controls may prevent some web pages from working properly.)
- Silently Stealth Unused Ports: Lets you disable alert messages that are otherwise issued when an inbound connection attempt is made to a <u>port</u> on your PC and a corresponding listening service is not available on your PC. Checking this option does not compromise security since attempts to connect will always fail when there is no corresponding listening service. For example, this situation would occur if someone tried to connect to your system with Symantec's pcAnywhere and you didn't have a pcAnywhere host running on your local system.
- Enable Personal Firewall Alerts:

Click this option to give some discretionary control when an application tries to connect to the network but no firewall rule exists for it. If the option is enabled, you will be able to temporarily permit or block the application from accessing the network, or create a <u>firewall rule</u> for the application.

Disable this option if you want to block applications from accessing the network when there are no specific firewall rules in place for them.

#### Choose an item for more information:

Personal Firewall settings

Java Applet Security settings

**ActiveX Control Security settings** 

Click here {button ,AL("About the Security window;Norton Internet Security overview;Restricting Access to Internet Applications",0,'','')} for more information.

## **Personal Firewall settings**

The Personal Firewall has three basic settings:

- Minimal: Enables firewall protection but with a minimal number of firewall rules. This level of protection keeps out commonly used network-based attacks.
- Medium: Enables firewall protection that blocks all ports except those specifically permitted by the user. This setting assures good security without undo intrusiveness or performance penalties.
- High: Enables comprehensive firewall protection. No access to the Internet is allowed unless there is an explicit firewall rule for that type of access. Although this setting provides the highest level of protection, it may affect network performance and block some legitimate Internet services.

Click here {button ,AL("firewall faq;firewall general;technical support;To view or modify firewall rules;Understanding Internet-based risks and threats",0,`',`')} for more information.

## **Java Applet Security settings**

The Java Applet Security control has three settings:

- None: Allows Java applets to run.
- Medium: Prompts each time a Java applet attempts to run.
- High: Blocks Java applets. (Blocking Java applets may prevent some web pages from working properly.)

**Note:** This feature is only available when the Personal Firewall is set to high.

Click here {button ,AL("Norton Internet Security overview;technical support;To view the Norton Internet Security log file;Understanding Internet-based risks and threats",0,`',`')} for more information.

# **ActiveX Control Security settings**

The ActiveX Control Security control has three settings:

- None: Allows ActiveX controls to run.
- Medium: Prompts each time an ActiveX control attempts to run.
- High: Blocks ActiveX controls. (Blocking ActiveX controls may prevent some web pages from working properly.)

Click here {button ,AL("Norton Internet Security overview;technical support;To view the Norton Internet Security log file;Understanding Internet-based risks and threats",0,`',`')} for more information.

#### **About the Privacy window**

In the Privacy window you can view, modify, and enable Internet security settings.

The Privacy Level slider provides three Privacy settings:

- High: Prompts you each time confidential information is sent from the computer to a non-secured Web site (HTTP). Likewise, you are prompted each time a <u>cookie</u> is sent to a Web site. Browser privacy is also enabled to prevent Web sites from retrieving the address of the last Web site visited or the email address used with the browser.
- Medium: Prompts you each time confidential information is sent from the computer to a non-secured Web site (HTTP). Cookies, however, are sent to Web sites without requiring your permission. Browser privacy is also enabled to prevent Web sites from retrieving the address of the last Web site visited or the email address used with the browser.
- Minimal: Disables the monitoring of confidential information sent to Web sites. Cookies are not blocked but browser privacy is enabled so that Web sites cannot retrieve the last Web site that was visited or the email address used with the browser.

The default setting is Medium. It provides a good balance between security benefits and possible issues of convenience and performance.

To protect credit card information and other sensitive data from being sent out over the web, click **Confidential Info**.

To control specific Security settings, click **Custom Level**. If you change the Security settings and want to revert to the original settings, click **Default Level**.

Click here {button ,AL("Cookies;Norton Internet Security overview;Safeguarding the privacy of family members;technical support;Understanding Internet-based risks and threats",0,'','')} for more information.

# **Confidential Information dialog box**

The Confidential Information feature lets you block specific information from going out to Web sites. For example, you could enter your family's home address if you did not want your children divulging it when they filled out registration and contest forms on the web.

The program blocks only confidential data sent to Web sites by means of <u>HTTP</u>. It does not block data sent out by secure protocol (HTTPS) or through applications that use other protocols (email, chat programs, news readers, and so on).

Click here {button ,AL("About the Privacy window;Restricting Access to Internet Applications;technical support;Understanding Internet-based risks and threats",0,`',`')} for more information.

# Add or Modify Confidential Information dialog box

Use the dialog box to place confidential information in the database for protection by Norton Personal Firewall.

**Note:** Norton Personal Firewall will block only the exact character sequence you enter in the database. For this reason, you may need to create several separate entries to protect your data. For example, if you entered a phone number as 555-444-4444, the sequence (555) 444-4444 would be permitted. Inserting spaces in the character sequence also affects how your data is blocked.

Click here {button ,AL("About the Privacy window;Norton Internet Security overview;technical support",0,`',`')} for more information.

# **Customize Privacy Settings dialog box**

This dialog box lets you create a customized level of privacy.

- Confidential Information: Specifies how confidential information is handled when you enter it on a Web site.
- Cookie Blocking: Specifies how <u>cookies</u> are handled when a Web site requests them.
- Enable Browser Privacy: Prevents a Web site from retrieving your email address from the browser and finding out which Web site was last visited.
- Enable Secure Connections (HTTPS): Lets you access Web sites using HTTPS, a secure protocol that is often required for credit card purchases.

Click here {button ,AL("About the Privacy window;Safeguarding the privacy of family members;Understanding Internet-based risks and threats",0,`',`')} for more information.

## **Norton Personal Firewall Options**

Use these options to control general configuration settings for Norton Personal Firewall.

- Show Taskbar Icon: Check this option to display the Norton Personal Firewall icon in the system tray. You can then click the icon to log in and out of Norton Personal Firewall, exit the program, or perform other tasks.
- Startup: Click the startup option you prefer:
- Click Manual if you don't want Norton Personal Firewall to start automatically.
- Click Run at System Startup to have the program start automatically when you start your PC.
- View Event Log: Click to view a log containing information on content blocking, connections, firewall activity, and other Norton Personal Firewall events.
- View Statistics: Click to view real-time, detailed statistics that indicate how Norton Personal Firewall is protecting your system.
- Clear Statistics: Click to reset the statistics shown in both the Status window and the Statistics window.
- Advanced Options: Click this option to change advanced settings for the <u>Personal Firewall</u> and other Norton Personal Firewall features.

Click here {button ,AL("About the Security window; Norton Internet Security overview; To view the Norton Internet Security log file; Understanding Internet-based risks and threats",0,'','')} for more information.

# **Subscription Information**

This window shows the status of your subscription. It provides information about how long your subscription will be in force.

It is important to keep your subscription current, or you will not be protected from new Internet threats.

Click Renew to extend your subscription.

Click here {button ,AL("Live Update",0,`',`')} for more information.

### **Norton Personal Firewall Alert**

This alert indicates that your PC is attempting some form of network communication, but there are no <u>firewall rules</u> in place to deal with it. In this situation, Norton Personal Firewall provides three options:

- Onfigure a rule for the future: Creates a firewall rule using the Rule Assistant, a wizard that guides you through the rule-creation process. Once you create a new rule for the program, Norton Personal Firewall will not need to alert you in the future.
- Block this network communication this time: Blocks the network connection one time. No firewall rule is created.
- Permit this network communication this time: Permits the network connection one time. No firewall rule is created.

Click here of for more information.

### **Security Alert Details**

A security alert indicates that some form of network communication has been attempted between your PC and another computer. This event was detected and logged by the program's <u>Personal Firewall.</u>

The event triggered an alert because it matched the criteria set by one of the <u>firewall rules</u>. The name of the <u>firewall rules</u>. The name of the <u>firewall rule</u> is shown in the Security Alert Details dialog box. For more information, you can view the <u>event log</u> and examine the <u>firewall rule</u> that was enforced.

Click here {button ,AL("About the Security window;Norton Internet Security overview;Restricting Access to Internet Applications;Understanding Internet-based risks and threats",0,`',`')} for more information.

#### **Using the Rule Assistant**

#### **Create Permit Rule: Introduction**

The Rule Assistant indicates the type of rule you are creating and the properties of the rule that are currently defined. By default, the rule only permits this type of communication when using the application, service or ICMP message type, and address indicated. The Rule Assistant will present a series of choices that let you to modify the rule properties, making the rule more permissive.

You'll be asked to make these decisions:

- Does the rule permit this type of communication only for the application shown or does it apply to all applications? (not applicable for ICMP messages)
- If this is TCP or UDP network communication, does the rule permit communication only when using the remote service shown or does it apply to all types of services?
- If this is ICMP network communication, does the rule permit communication only when using the ICMP message type shown or does it apply to all types of ICMP messages?
- Does the rule permit communication only with the remote address shown or does it apply to communication with any address?

Click here {button ,JI('>maintwo', 'HELPID\_RULEWIZARD\_APP\_PERMIT')} to continue defining a permit rule.

# Create Permit Rule: Permit Communication by One or by All Applications

The Rule Assistant indicates the type of communication that the rule will permit. You must choose whether the rule should permit this type of communication only when using the application shown or permit this type of communication when using any application.

Click here {button ,JI(`>maintwo', `HELPID\_RULEWIZARD\_SERVICE\_PERMIT')} to continue defining a permit rule.

### Create Permit Rule: Permit Communication by One or by All Services

The Rule Assistant indicates the type of communication that the rule will permit and whether the rule applies to a specific application or applies to any application.

Now choose whether the rule should permit this type of communication only when using the remote service shown or permit this type of communication when using any service.

Click here {button ,JI(`>maintwo',`HELPID\_RULEWIZARD\_TYPE\_PERMIT')} to continue defining a permit rule.

## Create Permit Rule: Permit Communication by One or by All ICMP Message Types

The Rule Assistant indicates the type of ICMP message that the rule will permit.

You must choose whether the rule should permit <u>ICMP network communication</u> only when using the ICMP message type shown or permit ICMP communication when using any ICMP message type.

Click here {button ,JI(`>maintwo',`HELPID\_RULEWIZARD\_ADDR\_PERMIT')} to continue defining a permit rule.

#### Create Permit Rule: Permit Communication with One or with All Addresses

- For TCP or UDP network communication, the Rule Assistant indicates the type of communication that the rule will permit and what application(s) and services it applies to.
- For ICMP network communication, the Rule Assistant indicates the type of type of communication that the rule will permit and what ICMP message type(s) it applies to.

Now choose whether the rule should permit this type of communication only when using the address shown or permit this type of communication when using any address.

Click here {button ,JI(`>maintwo', `HELPID\_RULEWIZARD\_FINISH\_PERMIT')} to continue defining a permit rule.

## **Create Permit Rule: Rule Summary**

The Rule Assistant proposes a name for the rule you are creating. If you want to enter a different name for the rule, type it in the edit box. The rule name will be added to the Firewall Rule list on the Firewall tab in the Settings dialog box. Specify a name that lets you identify what the rule does.

The rule summary indicates the properties you've defined for the rule. If you want to change a rule property, click the Back button to reach the panel that determines the property you want to change.

If you want an entry to be written to the Firewall event log when any network communication matches this rule, select the Write check box.

Click Finish to create the permit rule.

- The rule is applied for the current communication event and for all future events of this type.
  - The rule is added to the list of rules maintained on the Firewall tab in the Settings dialog box.

Click here of for more information.

#### **Create Block Rule: Introduction**

The Rule Assistant indicates the type of rule you are creating and the properties of the rule that are currently defined. By default, the rule only blocks this type of communication when using the application, service or ICMP message type, and address indicated. The Rule Assistant will present a series of choices that allow you to modify the rule properties, making the rule more restrictive.

You'll be asked to make these decisions:

- Obes the rule block this type of communication only for the application shown or does it apply to all applications?
- If this is TCP or UDP network communication, does the rule block communication only when using the remote service shown or does it apply to all types of services?
- If this is ICMP network communication, does the rule block communication only when using the ICMP message type shown or does it apply to all types of ICMP messages?
- Does the rule block communication only with the remote address shown or does it apply to communication with any address?

Click here {button ,JI('>maintwo', 'HELPID\_RULEWIZARD\_APP\_BLOCK')} to continue defining a block rule.

# Create Block Rule: Block Communication by One or by All Applications

The Rule Assistant indicates the type of communication that the rule will block. You must choose whether the rule should block this type of communication only when using the application shown or block this type of communication when using any application.

Click here {button ,JI(`>maintwo',`HELPID\_RULEWIZARD\_SERVICE\_BLOCK')} to continue defining a block rule.

# Create Block Rule: Block Communication by One or by All Services

The Rule Assistant indicates the type of communication that the rule will block and whether the rule applies to a specific application or applies to any application.

Now choose whether the rule should block this type of communication only when using the remote service shown or block this type of communication when using any service.

Click here {button ,JI('>maintwo', 'HELPID\_RULEWIZARD\_TYPE\_BLOCK')} to continue defining a block rule.

# Create Block Rule: Block Communication by One or by All ICMP Message Types

The Rule Assistant indicates the type of ICMP message that the rule will block.

You must choose whether the rule should block ICMP network communication only when using the ICMP message type shown or block ICMP communication when using any ICMP message type.

Click here {button ,JI('>maintwo', 'HELPID\_RULEWIZARD\_ADDR\_BLOCK')} to continue defining a block rule.

#### Create Block Rule: Block Communication with One or with All Addresses

- For TCP or UDP network communication, the Rule Assistant indicates the type of communication that the rule will block and what application(s) and service(s) it applies to.
- For ICMP network communication, the Rule Assistant indicates the type of communication that the rule will block and what ICMP message type(s) it applies to.

Now choose whether the rule should block this type of communication only when communicating with the address shown or block this type of communication when communicating with any address.

Click here {button ,JI('>maintwo', 'HELPID\_RULEWIZARD\_FINISH\_BLOCK')} to continue defining a block rule.

## Create Block Rule: Rule Summary

The Rule Assistant proposes a name for the rule you are creating. If you want to enter a different name for the rule, type it in the box. The rule name will be added to the Firewall Rule list on the Firewall tab in the Settings dialog box. Specify a name that allows you to identify what the rule does.

The rule summary indicates the properties you've defined for the rule. If you want to change any of the rule properties, select the alternative setting from one of the drop-down lists or click Back to reach the panel that determines the property you want to change.

If you want an entry to be written to the Firewall event log when any network communication matches this rule, select the Write check box.

Click Finish to create the block rule.

- The rule is applied for the current communication event and for all future events of this type.
- The rule is added to the list of rules maintained on the Firewall tab in the Advanced Options dialog box.

Click here of for more information

# **Create Rule: Specifying Network Communication Settings**

The Rule Assistant indicates the type of communication that the rule will permit. You must choose whether the rule should permit this type of communication only when using the application shown or permit this type of communication when using any application.

Click here • for more information.

# Create Permit or Block Rule: Choosing a Category

The Rule Assistant prompts you to select a category for the application.

Click here • for more information.

## Inbound Communication Attempt from an Unknown Application

If Norton Internet Security notifies you that an "unknown application" is attempting to connect to your system, it may mean that an intruder is trying to gain access to your PC. Although an attack of this type does not pose a security threat (no corresponding service is running on your PC to allow the connection), you may prefer to create a firewall rule to prevent the warning from appearing in the future.

To create a firewall rule using the Rule Assistant, click **Configure a rule for the future** in the Alert dialog box.

Click here of for more information.

# Create Block Rule: Rule Summary

The Rule Assistant proposes a name and properties for the rule you are creating. Click **Finish** to create the rule.

Click here of for more information.

#### **About the Statistics window**

Norton Personal Firewall Statistics shows you the real time state of the Norton Personal Firewall system. It displays several sets of counters indicating web- and firewall-related activity for the current session.

Use the View menu to do the following:

- To keep the Statistics window in view while you work in other applications, select Always on Top. A check next to this option indicates that it is active. To turn off this feature, click the command again.
- To choose the number of columns in the statistics window, point to columns on the view menu, then choose a one column display, a two column display, or let the display determine columns automatically based on the size of the Statistics window.
- To reset counters to zero, click Reset Values. All counters except those associated with Network Connections and Estimated Single Graphic Size are reset.
  - To specify which set of counters is displayed, click Options on the View menu.

Choose a topic for details about the statistics counters:

- Network 0 Web 0 0
- Firewall TCP Connections
- Firewall UDP Datagrams
- Firewall Rules
- Network Connections
- Last 60 Seconds

#### **About Network Statistics**

The Statistics window shows you real time network counters since the program started.

To see the network statistics: On the View menu, click **Options** and check the **Network** check box.

TCP Bytes Sent

The number of TCP bytes sent over network connections since the program started.

TCP Bytes Received

The number of TCP bytes received over network connections since the program started.

UDP Bytes Sent

The number of UDP bytes sent over network connections since the program started.

UDP Bytes Received

The number of UPD bytes received over network connections since the program started.

All Bytes Sent

The number of NDIS bytes sent over network connections since the program started.

All Bytes Received

The number of NDIS bytes received over network connections since the program started.

Open Connections

The current number of network connections. In addition, a red line indicates the highest number of simultaneous open network connections since the program started. The number at the far right shows the scale used for this graphic indicator.

#### **About Web Statistics**

The Statistics window shows you real time counters indicating web-related activity for the current session.

To see the web statistics: On the View menu, click **Options** and check the **Web** check box.

Graphics Blocked

Number of graphics blocked by the program.

Cookies Blocked

Number of outbound cookies blocked by the program's HTTP Privacy filter.

Refer Reg Blocked

Number of refer requests rejected by the program's HTTP privacy filter. This behavior is configured using the Referer setting.

Bytes Processed

Number of bytes processed by the program's HTTP ad blocker and privacy filters.

Packets Processed

Number of packets processed by the program's HTTP ad blocker and privacy filters.

KB/Second Processed

Number of kilobytes processed per second by the program's HTTP ad blocker and privacy filters. In addition, a red line indicates the highest number kilobytes per second processed since the program started. The number at the far right shows the scale used for this graphic indicator.

Open Connections

Number of HTTP connections currently open. In addition, a red line indicates the highest number of HTTP connections that have been open at the same time since the program started. The number at the far right shows the scale used for this graphic indicator.

## **About Firewall TCP Connections Statistics**

The Statistics window shows you real time counters indicating firewall-related TCP activity. To configure this behavior, use options on the <u>Firewall</u> tab in the Settings dialog box to define firewall rules.

To see the firewall TCP counters: On the View menu, click **Options** and check the **Firewall TCP Connections** check box.

Inbound Permitted

Counter shows the number of inbound TCP connections that were permitted.

Inbound Blocked

Counter shows the number of inbound TCP connections that were blocked.

Outbound Permitted

Counter shows the number of outbound connections that were permitted.

Outbound Blocked

Counter shows the number of outbound connections that were blocked.

Total Permitted

Counter shows the sum of all permitted connections (both inbound and outbound).

Total Blocked

Counter shows the sum of all blocked connections (both inbound and outbound).

# **About Firewall UDP Datagrams Statistics**

The Statistics window shows you real time counters indicating firewall-related UDP activity for the current session. To configure this behavior, use options on the <u>Firewall</u> tab in the Settings dialog box to define firewall rules.

To see the firewall UDP counters: On the View menu, click **Options** and check the **Firewall UDP Datagrams** check box.

Inbound Permitted

Counter shows the number of inbound datagrams that were permitted.

Inbound Blocked

Counter shows the number of inbound datagrams that were blocked.

Outbound Permitted

Counter shows the number of outbound datagrams that were permitted.

Outbound Blocked

Counter shows the number of outbound datagrams that were blocked.

Total Permitted

Counter shows the sum of all permitted datagrams (both inbound and outbound).

Total Blocked

Counter shows the sum of all blocked datagrams (both inbound and outbound).

#### **About the Firewall Rule Statistics**

The Statistics window shows you real time counters indicating firewall-related activity for the current session.

To see the firewall rule statistics: On the View menu, click Options and check the Firewall Rules check box.

The Firewall Rule Stats window lists all of the rules defined for your firewall. Three counters are maintained for each rule: Permitted, Blocked, and Passed Along. A running total for all rules indicates how many communication attempts were permitted, how many were blocked, and how many were passed along.

Each time network communication occurs, the counters are updated to indicate how the firewall reacted to the communication. Each network communication attempt is checked against the existing firewall rules starting from the top of the list and progressing on to the botton. If the communication is permitted by a rule, the Permitted counter increments. If the communication is blocked by a rule, the Blocked counter increments. If the communication does not match a rule, then information about the connection is passed on to the next rule and the Passed Along counter increments.

# **About Network Connection Statistics**

The Statistics window shows you real time counters indicating network connection information for the current session. This information is also available from the status bar. You can also terminate a connection here: Right-click a connection and then click Terminate Connection on the popup menu.

To see the network connection statistics: On the View menu, click **Options** and check the **Network Connections** check box.

Protocol TCP or UDP. The icon associated with the protocol indicates the connection status (listening,

connected/outgoing).

Executable The application that is using the network connection.

Remote The address or host name of the remote site and the service or port number. This information is

available for TCP connections only.

Local The local address or machine name and the service or port number being used by the

application.

Sent Number of bytes sent since the connection started.

Recv Number of bytes received since the connection started.

Time The amount of time that the connection has been active.

# **About Last 60 Second Statistics**

You can see a graphic representation of network activity for the last 60 seconds.

To see the last 60 seconds statistics: On the View menu, click **Options** and check the **Last 60 Seconds** check box.

Four different counters are represented in a line graph on a second by second basis. This allows you to note the speed of various network connection types.

HTTP Connections red graph line

Net Connections green graph line

HTTP KBytes/Sec blue graph line

Net Kbytes/Sec black graph line

The current settings for this user are shown in the Security, Privacy, Parental Control, and Ad Blocking windows. If the user is not logged on the name appears in red; if the user is logged on the name is shown in blue.

If you have logged on to the program and have supervisor rights, you can select any user account from the list and then make changes to the user's Security, Privacy, Parental Control and Ad Blocking settings. Any changes you make are automatically saved but don't go into effect until the user logs on to the program.

Click to suspend or resume the Security protection features.

Click to suspend or resume the Privacy protection features.

Click to suspend or resume the Parental Control features.

Click to suspend or resume the Ad Blocking features.

Click to specify any confidential data that you want protected from going out over the web (HTTP).

The Personal Firewall has four basic settings:

- None: Disables the firewall blocking and alerting.
- Low: Enables firewall protection but with a minimal number of firewall rules. This level of protection is designed to keep out commonly used attacks.
- Medium: Enables firewall protection using a set of rules that blocks all ports except those used by common Internet applications. This setting assures good security without intrusiveness or performance overhead.
- High: Enables comprehensive firewall protection. No access to the Internet is allowed unless there is an explicit firewall rule for that type of access. Although this setting provides the highest level of protection, it may affect network performance or block some legitimate Internet services.

Using the following settings, you can control how Java applets work on your system:

- None: Allows all Java applets to run on your PC.

  Medium: Prompts you each time a Java applet attempts to run on your PC.

  High: Prevents all Java applets from running.
- 0

Using the following settings, you can control how ActiveX controls work on your system:

- None: Allows all ActiveX controls to run on your PC.

  Medium: Prompts you each time an ActiveX control attempts to run on your PC.

  High: Prevents all ActiveX controls from running.
- 0

Click to enable or disable all of the Security features. If you disable the Security features, the Personal Firewall is turned off and no blocking of Java applets or ActiveX controls will occur.					

Click to enable or disable Privacy protection for the user.

This button enables or disables all of the Parental Control features.

This button enables or disables all of the Ad Blocking protection features.

Click to create a new account.

Click to remove the selected account.

Number of network accesses blocked by the Security controls. Click anywhere on this display area to see more information.

Number of network accesses allowed by the Security controls. Click anywhere on this display area to see more information.

Number of network accesses blocked by the Privacy controls. Click anywhere on this display area to see more information.

Number of network accesses allowed by the Privacy controls. Click anywhere on this display area to see more information.

Number of network accesses blocked by the Parental Controls. Click anywhere on this display area to see more information.

Number of network accesses allowed by the Parental Controls. Click anywhere on this display area to see more information.

Number of network accesses blocked by the Ad Block controls. Click anywhere on this display area to see more information.

Drag the slider to change the user's Security settings. Higher settings provide more security but may impact system performance and convenience.	

Drag the slider to change the user's Privacy settings. Higher settings provide more privacy but may impact system performance and convenience.	

Click to set up customized Security settings for the user.

Click this button if you have customized the user's Security settings and want to revert back to the original default setting of Medium.

Check this option to disable alert messages that are otherwise issued when an inbound connection attempt is made with no corresponding listening service. Checking this option does not compromise security since attempts to connect will always fail when there is no corresponding listening service.

Click to set up customized Privacy settings for the user.

Click this button if you have customized the user's Privacy settings and want to revert back to the original default setting of Medium.

Choose the type of information you want to block from going out over the web (HTTP).

Enter a meaningful name for the information you want to block.

Enter the exact sequence of characters, including spacing, that you want to block.

Click to block all sites except those you specify as acceptable. Use this option if you want to let the child visit only a few andpicked sites.	

Click to let the user visit any Web site unless it is blocked by the category list or it appears in an additional block list.

Click if you need to enter any exceptions to the category list.

Click all the categories in the list to block. If a category in the list is unchecked, the user can visit sites of that type.

Sites in this list are blocked in addition to those Web sites in checked categories. Click **Add** to enter a site to this list.

Click to add a site to the list. Sites in this list are blocked in addition to those sites checked in the categories list.

Click to remove a site from the list of additional sites to block.

Sites in this list are not blocked, even if they fall under Symantec's blocked category list.

Click to add a site to the exceptions list. Sites in this list are not blocked, even if they fall under Symantec's blocked category list.

Click to remove a site from the exceptions list.

Enter the address of the Web site.

The user will be allowed to visit only the sites that appear in this list—access to all other sites is blocked. Click Add or Remove to modify the list.	

Click to add a site to the list of permitted sites.

Click to remove a site from the list of permitted sites.

Click to use the site blocking controls to manage your child's access to the web.

Click t on).	o use 1	the ap	plicatior	ı blockir	ng contr	ols to ma	anage y	your ch	ild's acc	cess to	Internet	programs	(chat, e	email, ga	ames, an	d so

allow access to all Internet applications but block access to some types of Web sites.									

Click to discard any changes you made to your child's site and application settings. The default settings for a child's account

Check the categories of Internet-based applications that you want your child to be able to use.

Click to enable or disable all of the program features.

Description, type, and content associated with the confidential information blocked by the program.

Click to add a new piece of information to be blocked from going out to Web sites (HTTP).

Specifies how confidential information is treated when the user attempts to enter it at a Web site.

Specifies how cookies are treated when a Web site attempts to access them.

Check to prevent Web sites from obtaining the email address from the browser and the last site visited.

Check to allow the user to use the secure connections protocol when visiting a Web site. If this option is not checked, the user will be prevented from conducting credit card transactions at many sites.

Click to block specific advertising graphics displayed in either Internet Explorer or Netscape Navigator.

Click to log in or log off of the program.

Click the user account from the drop-down list.

Enter the password for the user account.

Click to change the password of the logged-in user.

Enter the current password.

Enter the new password.

Enter the new password to confirm your change.

The list shows the names and types of user accounts:

- Users with Supervisor rights can change the settings of any account.
- Users with Normal rights can only change their own account.
- Users with Restricted rights cannot make changes to any accounts.
- The Not Logged In account is a built-in account that prevents any network access. This account becomes active when a user logs off of the program.
- The Startup account is automatically logged in each time the program starts up. To change Startup accounts, click **Properties**.

Click to change the basic properties of the selected account.

Enter the name of the account you want to create.

Password for the account.

Confirmation password for the account.

Select the profile that best fits the individual for whom you are creating the account. Each profile has its own specific Internet access rights and privileges.

Check to have the program automatically log the user in each time the program starts.

Name of the user account.

## Choose the type of account for the user:

- Supervisors can change the settings of any user's account. Normal users can change only their own account settings. Restricted user cannot change the settings of any account.
- ٠ •

Check this option to give the user some discretionary control when an application tries to connect to the network but no firewall rule exists for it. If this alerting option is enabled, the user can allow or block the connection. If the user has supervisor rights, they can create firewall rules that control how the application connects to the network.

If you disable the option, applications that are not covered by specific firewall rules will be blocked from accessing the network.

This option is unavailable to Restricted users.

Check to have the account log in automatically each time the program is started.

Click to remove the confidential information entry in the list.

Click to edit the confidential information entry selected in the list.

The HTTP Port List shows all of the HTTP ports monitored by the program. The default list contains all the standard HTTP ports, but you can add ports if you use applications that perform HTTP communication through nonstandard ports.

Click to add a new HTTP port to the list.

Click to remove an HTTP port from the list.

Click to block all forms of IGMP (Internet Group Management Protocol) communications, a protocol sometimes exploited by attackers to hang a victim's system.						

Click to block IP packets that are severely fragmented. IP packets of this type are typically used for purposes of attack rather than legitimate network communications.

Click to have the program automatically create firewall rules for you when an attempts to connect to the network and there are no firewall rules in place for that application.

If you want more control over the creation of firewall rules, you can disable this option so that you are prompted to create new firewall rules yourself using the Rule Assistant wizard. (This occurs only if Security is set to High and you are a Supervisor with the Enable Firewall Alerts account property enabled. If any of these conditions are not true, the program will allow the connection to occur.)

Time remaining before your content subscription expires. Content updates include new Web site profiles you can use create a child-friendly Internet environment, as well as new rules for the Personal Firewall that protect your PC from the latest hacker attacks.

Click for specific information about the alert.

Sets script-blocking options for individual sites or for (Defaults):

- 0 Use default script behavior: Lets (Defaults) control the Script setting. Select (Defaults) to view the Script setting that will be used.
- Block all scripts: Blocks JavaScript and VBScript from running.
- 0 Block script popups only: Blocks only scripts that open popup windows in your browser. Allow all scripts to execute: Allows VBScript and JavaScript to run.
- 0

Controls how Java applets and ActiveX controls are blocked by individual sites in the list.

To change the Binary Executable settings for (Defaults), use Security window options.

Sets Java applet options for individual sites:

- Use default Java applet behavior: Lets (Defaults) control the Java applet setting. Select (Defaults) to view the Java applet setting that will be used.
- Block Java applets: Blocks Java applets from running on your PC.
- Allow Java applets to execute: Allows Java applets to run on your PC.

Note: The Java applet setting for (Defaults) is controlled by Security window options and cannot be overridden with this control.

Sets ActiveX blocking options for individual sites:

- Use default ActiveX behavior. Lets (Defaults) control the ActiveX setting. Select (Defaults) to view the ActiveX setting that will be used.
- Block ActiveX controls: Blocks ActiveX controls from running on your PC.
- Allow ActiveX controls to execute: Allows ActiveX controls to run on your PC.

Note: The ActiveX setting for (Defaults) is configured in the Security window and cannot be overridden with this control.

Sets animated GIF options for individual sites or for (Defaults).

Set the GIF option for the selected site or for (Defaults):

- Use default animation behavior: Lets (Defaults) control the Animated GIF setting. Select (Defaults) to view the animated GIF setting that will be used.
- Allow animations to repeat: Allows animated GIF files to run on your PC.
- Block animations repeating: Blocks animated GIF files from running on your PC. Only the first frame of the GIF will be displayed.

When checked, the program icon displays in the notification area on the Windows taskbar (by default, in the right corner at the bottom of the screen). You can click the icon to open the main menu.

The options under Startup determine whether the program starts automatically or must be started manually.

If you want complete control over when the program runs on your PC, click Manual. You must start the program to use it.

The options under Startup determine whether the firewall starts automatically or must be started manually.

If you are using a networked PC or have a continuous Internet connection and you want the firewall protection available at all times, click Run at System Startup. The firewall starts automatically when you start up your PC.

The options under Startup Options determine whether the firewall starts automatically or must be started manually.

The firewall has three web filters: Ad blocking, Privacy, and Active content.

Displays a hierarchical site list showing each of the domains and sites for which web settings have been defined.

When you click a site in the list, the tab pages update to show the settings defined for that site. Use options on these tab pages to maintain site-specific settings for the currently selected site.

Opens the New Site/Domain dialog box, which you use to add a new site or domain to the hierarchical site list in the left pane.

After adding the site, you can click it in the site list and then use settings on the tab pages to specify rules and block list entries that only run when you visit this Web site.

Removes the currently selected site or domain from the site list. The firewall prompts for confirmation before it removes the entry.

When a site or domain is removed, the site-specific or domain-specific privacy and active content settings are discarded.

If you remove a domain, all of the site entries beneath that domain are promoted within the site list hierarchy to become second-level entries.

Opens the Web (HTTP) Filters dialog box where you can selectively enable or disable the privacy and active content web filters, the Cookie Assistant, and the Java/ActiveX Assistant.

In addition, you can manage the list of ports that the firewall monitors for HTTP communication when ad blocking is enabled.

When clicked, the Cookie Assistant prompts for a response each time a cookie is requested by a Web site that doesn't have a cookie rule.

The Cookie Assistant gives you the option to block or permit the return of a cookie, and to create a cookie rule that applies to all future requests for cookies by this site.

If the Privacy check box is unchecked, the Cookie Assistant setting is unavailable.

When clicked, the Java/ActiveX Assistant prompts for a response each time JavaScript, a Java applet, or an ActiveX control is received from a Web site that doesn't have any site-specific active content rules.

The Java/ActiveX Assistant gives you the option to block or permit Java or ActiveX program execution, and to create an active content rule that applies to all future attempts to run this type of program by this site.

If the Active Content check box is unchecked, the Java/ActiveX Assistant setting is unavailable.

Select this check box to turn on the ad blocking filter, which prevents images and ads from displaying on web pages opened in your browser. To specifically turn off the ad blocking filter, uncheck this check box.

Specifies whether the privacy filter is enabled. The privacy filter uses the rules on the Privacy tab to block or permit the return of user information and cookies to Web sites.

If you are concerned with privacy, click the Privacy check box and then use the settings on the Privacy tab to specify how you want the rules to be enforced.

Specifies whether the active content filter is enabled. The active content filter uses the rules on the Active Content tab to control whether web pages run JavaScript, Java applets, ActiveX controls and display animated images.			

The Use These Rules for <site> check box determines whether the active content rules apply specifically to the current site.

When checked, Use These Rules For <site> specifies that you want to use site-specific active content settings for the current site. You can change each of the active content settings for the site as desired.

When the Use These Rules For <site> check box is unchecked, the active content settings are unavailable.

This message indicates how active content rules are determined for the currently selected site. There are several possibilities:

- The program will use rules from <domain>
  - Active Content rules are defined for the domain to which this site belongs.
- The program will use rules from (Defaults)

No site- or domain-specific active content rules are defined and the Java/ActiveX Assistant is not enabled. The program uses the (Default) active content rules.

The program will alert you with an Assistant

No site- or domain-specific active content rules are defined. The Java/ActiveX Assistant is enabled. When you visit this site, the Java/ActiveX Assistant will help you to create an active content rule for the site or for the domain that contains the site.

If you want to set up site-specific rules, click the Use These Rules For <site> check box, and then click the rule options you want to use for this site.

When clicked, prevents web pages from running JavaScript. The program comments out all of the HTML code within <script> </script> tags to block execution of JavaScript.			

Lets you add a new HTML string to the ad blocking list that is currently active.

Lets you remove an HTML string from the ad blocking list that is currently active.

Lets you change an HTML string in the ad blocking list that is currently active.

Shows the ad blocking list defined for the site that is currently selected in the Sites list (in the left pane). The ad blocking list consists of HTML strings that are used by the Ad Blocking filter to prevent ads and images from being displayed on web pages.

When ad blocking is enabled and you connect to a Web site, the program scans HTML pages at the site for the strings specified in the ad blocking list for that site. In addition, It checks for strings that match those that are specified in the ad blocking list for (Defaults). The program looks for matching strings within the kind of HTML tags that are used to present graphics and advertising. The program removes any matching strings before the page is displayed in the web browser.

The settings shown on the tab pages apply to the site that is currently selected in the Sites list (in the left pane). Click a tab to make the controls on the tab visible.				

Lists the rules that are in effect when the firewall is enabled. Rules are processed in the order in which they are listed.

You can add, modify, remove, or change the order of a rule in the list. You can also enable or disable any rule in the list.

When the firewall is enabled, any TCP/IP communication that is not covered by existing firewall rules is blocked by default.

Opens the Add Firewall Rule dialog box where you can specify a rule to permit a specific type of network communication.

Opens the Modify Firewall Rule dialog box where you can change the characteristics of a rule.

Prompts you to confirm that you want to delete the currently selected rule from the connection permission list. If you answer Yes, the rule is permanently removed.			

Opens the Test Firewall dialog box, where you can test whether a specified type of network communication would be permitted or would be blocked by existing firewall rules.

You don't have to enable the firewall in order to test the firewall rules.

Specifies whether the rule permits, blocks, or ignores the type of network communication defined within the rule.

communication in either direction.		

Specifies whether the rule applies to inbound network communication, outbound network communication, or network

Specifies what communications protocol the rule applies to: TCP, UDP, both TCP and UDP, or ICMP.

Categorizes the type of application for use with the Parental Control feature.

If you want to treat an application differently from others in the same category, place it in either User Category 1 or User Category 2. For example, if you want to permit certain games but block the majority of them, place acceptable games in User Category 1. When you configure applications in the Parental Control window, you could permit User Category 1 applications but block Games.

Click a tab to display the options on the tab.

Shows the type of network communication being attempted.

Indicates the application that is attempting to communicate.

For most ICMP network communication, no application is associated with an ICMP message. Consequently, Application will show N/A, meaning not applicable.

For TCP or UDP network communication, indicates the remote service that the application is communicating with.

For ICMP network communication, indicates the type of ICMP message that is being communicated.

Indicates the remote address that the application or ICMP message is communicating with.

Blocks this single instance of network communication. A firewall rule is not created.

Permits this single instance of network communication. A firewall rule is not created.

Enter the location and name of the application executable file to which you want this rule to apply. This setting is not available if Any Application is checked.	

Specifies that the rule applies to the application identified in the Application box.

Specifies that the rule applies to all applications on the local PC.

Other button.

Opens the Add Application From File System dialog box, where you can click the application that will be affected by the rule.

Lists the services to which the current rule applies. Use for this rule.	e the Add and Remove buttons to crea	ate and maintain the list of services

Lists the services to which the current rule applies. Use for this rule.	e the Add and Remove buttons to crea	ate and maintain the list of services

Click this option if you want the rule to apply to a single type of local service. Then, identify the service in the Service Name or Port box.	

Click this option if you want the rule to apply to a range of port numbers.

Removes the currently selected service from the list of services.

Click this option if you want the rule to apply to a defined list of services. Use the Add and Remove buttons to create the list of services.

Click this option if you want the rule to apply to any local service.

Opens the Service dialog box, where you can specify a service name (for example HTTP or FTP) or enter the port number used by that service. The service you specify is added to the list of services to which this rule applies.

If you clicked Single Service, enter the service name (for example HTTP or FTP) or enter the port number used by that service.

If you clicked Service Range, enter the first (lowest) port number in the range.

If you clicked Service Range, enter the last (highest) port number in the range.

Click this option if you want the rule to apply to a single type of remote service. Port box.	Then,	identify t	he service	in the Ser	vice Name	e or
TON SOA.						

Click this option if you want the rule to apply to a range of port numbers.

Click this option if you want the rule to apply to any remote service.

Click this option if you want the rule to apply to a defined list of services. Use the Add and Remove buttons to create the list of services.

Click this option if you want the rule to apply to a specific IP address for your PC. Then specify the IP address or the name of the host PC in the Address or Host Name box.					

Click this option if you want the rule to apply to communication to or from any IP address used by your local PC.

Enter the local IP address, PC host name, or available if Any Address is clicked.	local interface name to which you want this rul	le to apply. This option is not

Click this option if you want the rule to apply to a single remote IP address. Then specify the IP address or the name of the host in the Address or Host Name box.	

Click this option if you want the rule to apply to a set of addresses (for example, all the PCs on a particular subnet). In the Address and Subnet Mask boxes, enter the IP address and subnet mask that define the network address.

Click this option if you want the rule to apply to a range of IP addresses. In the First Address box, enter the first (lowest) IP address in the range. In the Last Address box, enter the last (highest) IP address in the range.

Click this option if you want the rule to apply to communication to or from any remote address.

If you clicked Host Address, enter the remote IP address or host name to which you want this rule to apply.

If you clicked Network Address, enter the IP address, which is used in conjunction with the Subnet Mask to define the network address.

If you clicked Address Range, enter the first (lowest) IP address in the range.

If you clicked Network Address, enter the subnet mask, which is used in conjunction with the IP address specified in the Address box to define the network address.

If you clicked Address Range, enter the last (highest) IP address in the range.

Click this option if you want the rule to apply to a single type of ICMP message. Then click the message type in the Type box.	

Click this option if you want the rule to apply to a defined list of ICMP message types. Use the Add and Remove buttons to create the list of Types.				

Click this option if you want the rule to apply to any type of ICMP message.

Specifies what type of ICMP message the rule applies to.

Lists the types of ICMP messages to which the current rule applies. Use the Add and Remove buttons to create and maintain the list of message types for this rule.

Opens the ICMP Type dialog box, where you can specify an ICMP message type. The message type you specify is added to the list of ICMP message types to which this rule applies.

Removes the currently selected ICMP message type from the list of types.

Opens a time scheduler dialog box where, for each day of the week, you can specify a time interval during which this rule will be in effect.

Click this button to specify that the current rule is in effect all day (24 hours) for the day indicated in the dialog box title.

Click this button to specify that the rule is never in effect for the day indicated in the dialog box title.

Indicates the starting time at which hour and minute selections.	the current rule becomes active.	To change the starting time,	click the button and then make

Indicates the ending time at which the current rule ceases to be active. To change the ending time, click the button and then make hour and minute selections from the time list boxes.	

To specify the hour at which the current rule becomes active, click the Start Time button and then click a time in this list box.

To specify the hour at which the current rule ceases to be active, click the End Time button and then click a time in this list box.

To specify the minute within the selected hour at which the current rule becomes active, click the Start Time button and then click a minute time in this list box.

To specify the minute within the selected hour at which the current rule ceases to be active, click the End Time button and then click a minute time in this list box.

When clicked, specifies that the currently defined time interval applies to every day of the week. The current rule becomes active each day during the specified time interval.	

Click this option if you want to create a cookie rule that will apply to cookie requests from all Web sites within the domain identified on the right.

Identifies the domain within which the currently active Web site resides. Click this option if you want to create a cookie rule that will apply to all Web sites within the domain.

Click this option if you want to create a cookie rule that will apply to all cookie requests from the specific Web site identified on the right.	

Identifies the name of the host for the that will apply only to the current site.	Web site that is requesting	a cookie. Click this option	if you want to create a cookie	rule

Indicates the time and date when the cookie request occurred.

Blocks this single cookie request. A cookie rule is not created.

Permits this single cookie request. A cookie rule is not created.

Creates a rule that prevents your browser from returning cookies to the identified Web site or domain upon request.

Click Domain to specify that the rule applies to cookie requests from all Web sites within the specified domain. Click Site to specify that the rule applies to cookie requests from the identified Web site only.

The rule is applied for the current cookie request and for all future requests.

A rule for the current site or domain is added to the Privacy tab in the Settings dialog box. To see or modify the cookie rule for the current site, click the site on the Web tab and then click the Web tab.

Creates a rule that permits your browser to return cookies to the identified Web site or domain upon request.

Click Domain to specify that the rule applies to cookie requests from all Web sites within the specified domain. Click Site to specify that the rule applies to cookie requests from the identified Web site only.

The rule is applied for the current cookie request and for all future requests.

A rule for the current site or domain is added to the Privacy tab in the Settings dialog box. To see or modify the cookie rule for the current site, click the site on the Web tab and then click the Web tab.

Shows the type of programming code that the web page is attempting to run.

Click this option if you want to create a rule that will apply to all Web sites within the domain identified on the right.

Identifies the domain within which the currently active Web site resides. Click this option if you want to create a rule that will apply to all Web sites within the domain.

Click this option if you want to create a rule that will apply to the specific Web site identified on the right.

Indicates the time at which the Java/ActiveX alert occurred.

Identifies the name of the host for the Web site that wants to run the Java or ActiveX code. Click this option if you want to create a rule that will apply only to the current site.

For one time only, the script is blocked and won't run. A rule is not created.

For one time only, the script is permitted to run. A rule is not created.

Creates a rule that prevents web pages received from the specified site or domain from running this type of Java or ActiveX code.

Click this option if you want to create a rule that blocks this type of code.

Creates a rule that permits web pages received from the specified site or domain to run this type of Java or ActiveX code.

Click this option if you want to create a rule that allows this type of code to run.

You must specify either that the rule applies only to the application indicated, or that it should be applied to all applications that attempt this type of network communication.

Click this option if you want the rule to apply only to the identified application.

Click this option if you want the rule to apply to all applications that attempt this type of network communication.

For TCP or UDP network communication, you must specify either that the rule as currently defined applies only to communications made using the service and port indicated, or that it should be applied to communications made using any service or port.

For ICMP network communication, you must specify either that the rule as currently defined applies only to communications made using the ICMP message type indicated, or that it should be applied to communications made using any ICMP message type.

For TCP or UDP network communication, click this option if you want the rule to apply only to communications made using the identified service or port.

For ICMP network communication, click this option if you want the rule to apply only to communications made using the identified ICMP message type.

You must specify either that the rule as currently defined applies only to communications made while connected to the address indicated, or that it should be applied to communications made while connected to any address.

Click this option if you want the rule to apply only to communication made when connected to the identified address.

Click this option if you want the rule to apply to communication made when connected to any address.

The Rule Assistant proposes a name for the rule you are creating. If you want to enter a different name for the rule, type it in the pox.	

ows the application to which the rule applies or shows that the rule applies to all applications. (Not applicable for ICMP mmunication.)	

For TCP or UDP network communication, shows the service to which the rule applies or shows that the rule applies when communicating using any services.

For ICMP network communication, shows the ICMP message type to which the rule applies or shows that the rule applies when communicating using any message type.

Shows the address to which the rule applies or shows that the rule applies when connected to any address.

Shows you the type of rule you are creating and the properties of the rule that are currently defined. By default, the communications rule applies to only the application, service or ICMP message type, and address indicated. The Rule Assistant will present a series of choices that let you modify the rule properties, making the rule more restrictive or more permissive.

Indicates the application that is attempting to communicate. (Not applicable for ICMP network communication.)

For TCP or UDP network communication, indicates the remote service that the application is communicating with.

For ICMP network communication, indicates the ICMP message type used for communication.

Indicates the remote IP address or host name of the machine that your PC wants to communicate with.

Specifies that the test should simulate communication coming from a machine that is connecting to your PC.

Specifies that the test should simulate communication going from your PC to another machine.

Specifies that the test should simulate TCP inbound or outbound connections.

Specifies that the test should simulate use of inbound or outbound UDP packets.

Specifies that the test should simulate use of inbound or outbound ICMP packets.

Specifies that the test should simulate communication using the specified remote service. Enter the name of the service or the port number used for the service. For example, under most circumstances, to test outbound FTP communication, specify FTP as the remote service or specify port number 21.

When clicked, specifies that the test should simulate inbound communication using any remote service.

When unchecked, you must specify the remote service or port number that would be used by the machine connecting to your PC.

Specifies that the test should simulate communication using the specified local service. Enter the name of the service or the port number used for the service. For example, under most circumstances, if you want to test a rule that should affect remote users connecting to the FTP server that runs on your local PC, you can specify FTP as the local service or specify port number 21.

When clicked, specifies that the test should simulate outbound communication using any local service.

When unchecked, you must specify the local service or port number that would be used by your PC to connect to the remote machine.

Specifies that the test should simulate outbound communication using the specified remote IP address. Enter the IP address or host name. For example, to test outbound FTP communication to an FTP server running on a specific remote host, enter the remote host's IP address or host name.

When clicked, specifies that the test should simulate inbound communication from any remote address.

When unchecked, you must specify the remote IP address or host name used by the machine that would be communicating with your PC.

Specifies that the test should simulate communication using the specified local IP address or machine name. Enter the local IP address or the machine name. For example, if you want to test a rule that should affect remote users connecting to the FTP server that runs on your local PC, you should specify the local IP address they will use to connect to the FTP server.

By default, your current PC IP address or machine name appears in the Local address box.

If your PC has network cards supporting multiple IP addresses, this setting lets you simulate communication using a specific IP address.

When clicked, specifies that the test should simulate outbound communication from any local address.

When unchecked, you must specify the local IP address or machine name used by your PC to connect to the remote server. If your PC has network cards supporting multiple IP addresses, this lets you simulate communication using a specific IP address.

If you want to test communications rules for a specific application, uncheck the Any Application check box. Then enter the location and name of the application executable file.

Opens the Add Application From File System dialog box, where you can select an application. The test will simulate either inbound or outbound communication with that application.					

When clicked, specifies that the test will simulate either inbound or outbound communication with any application.

When unchecked, the test will simulate either inbound or outbound communication with the application specified in the Application box.

Indicates whether the type of communication you are testing would be blocked or permitted.

Indicates the name of the rule that either permits or blocks the type of communication you are testing.

If no rule matches the test condition, the Test Result reports that the communication is blocked by the implicit block rule: when the firewall is enabled, any communication for which there is no rule defined is blocked by default.

When you perform a firewall test, if a rule matches the test condition, that rule is highlighted in the rules list on the Firewall tab in the Settings dialog box.

Click Test to see how the firewall works with the type of communication you've specified in the Test Firewall dialog box.

The Test Result indicates whether the type of communication you are testing would be blocked or permitted. It also shows the name of the rule that matches the type of communication you are testing.

If no rule matches the test condition, the Test Result reports that the communication is blocked by the implicit block rule: when the firewall is enabled, any communication for which there is no rule defined is blocked by default.

When you perform a firewall test, if a rule matches the test condition, that rule is highlighted in the rules list on the Firewall tab in the Settings dialog box.

Re-enter the password. To provide security, the string that you type here displays as asterisks.

The Firewall Rule Stats window lists all of the rules defined for your firewall. Three counters are maintained for each rule: Permitted, Blocked, and Passed Along. A running total for all rules indicates how many communication attempts were permitted, how many were blocked, and how many were passed along.

You must supply a password to open the Settings dialog box, the Event Log viewer, or the Statistics window.

The password you enter must match the password that was specified on the General tab in the Settings dialog box.

Type the HTML string that you want to add to the block list. Then choose whether to permit or block HTML image statements that contain this string.

The way that you define HTML strings in the ad blocking list will affect how restrictive or unrestrictive the firewall will be in its filtering of HTML data. Here are some examples:

Specifies that the HTML string should be used to block display of an ad or image.

When you create a block string, any HTML statement that contains a matching HTML string is removed before the page is interpreted and displayed in the web browser.

Specifies that the HTML string should be used to permit display of an ad or image.

You can create a permit string only in a site-specific list. The permit string is used to override a block string in the (Defaults) block list.

When you create a permit string, any HTML statement that contains a matching HTML string is allowed to remain on the page.

This message indicates the status of ad blocking. There are two possibilities:

**The Ad Blocking filter is not enabled:** The (Defaults) ad blocking list and any site-specific ad blocking list will be ignored because the ad blocking is not turned on. To enable it, click Ad Blocking in the Status window.

(Defaults) block list also applies: When you visit a Web site, the program uses two ad blocking lists: the (Defaults) list plus the site-specific list. The program provides a pre-defined (Defaults) ad blocking list that is applied globally to the content of all Web sites. You can add, modify, and remove strings in the (Defaults) block list.

You can add either a site entry or a domain entry to the site list.

Adding a domain entry lets you configure privacy and active content web setting defaults for all the web servers within the domain.

Adding a site entry lets you configure privacy and active content web settings for a single web server.

The Use These Rules For <site> check box determines whether the privacy rules apply specifically to the current site.

When clicked, Use These Rules For <site> specifies that you want to use site-specific privacy settings for the current site. You can change each of the privacy settings for the site as desired.

When the Use These Rules For <site> check box is unchecked, the privacy settings are unavailable.

If the Use These Rules For <site> check box is unchecked, a status message displays at the bottom of the Privacy tab indicating how the program will determine privacy rules for the current site.

This message indicates how Privacy rules are determined for the currently selected site.

The program can block, permit, or alter HTTP header information that is passed in each request that the browser sends to a web server. You can use the program to control the information passed in the following HTTP header fields: Referer, Browser (Useragent), and E-mail (From).

If you chose to replace Browser (User-agent) field information with a Reply, type the string that you want to use for the reply. This string will be sent as the content of the User-agent field each time the site requests data from a server.

This Browser (User-agent) Reply box is only available when you click Reply in the Browser (User-agent) list box.

These settings specify whether a site is provided with information about what kind of browser and operating system you are using when you request for data from their server. Normally, this information is passed in the User-agent field as part of the data request:

**Block:** When clicked, the program does not let your browser identify the browser and operating system you are using when it requests data from a server.

**Permit:** When clicked, the program permits your browser to identify the browser and operating system you are using when it requests data from a server.

**Reply:** When clicked, the program returns the string specified in the Browser (User-agent) box instead of the identity of the browser and operating system you are using.

If the Use These Rules For <site> check box is unchecked, the Browser (User-agent) settings are not available. In this case, a message below the Use These Rules For <site> check box indicates how the program determines which Privacy rules to use.

If you chose to replace E-mail (From field) information with a Reply, type the string that you want to use for the reply. This string will be sent as the content of the From field each time the site requests data from a server.

This E-mail (From) Reply box is only available when you click Reply in the E-mail (From) list box.

These settings specify whether sites are given the email address that your browser uses to identify you as the sender of mail. This information may be passed in the From field as part of the data request:

**Block:** When clicked, the program does not let your browser provide the email address that is used to identify you as the sender of mail

**Permit:** When clicked, the program permits your browser to provide the email address that is used to identify you as the sender of mail.

**Reply:** When clicked, the program returns the string specified in the E-mail (From) box instead of the email address that your browser uses to identify you as the sender of mail.

If the Use These Rules For <site> check box is unchecked, the E-mail (From) settings are not available. In this case, a message below the Use These Rules For <site> check box indicates how the program is determining which privacy rules to use.

If you chose to handle cookie requests with a Reply, type the string that you want to use for the reply. This string will be sent instead of a cookie each time the site makes a cookie request.

This Cookie Reply box is only available when you click Reply in the Cookies list box.

Some advertisers use cookies to track users on a variety of sites and send the information back to their corporate server. This setting specifies how requests for cookies are handled for the currently clicked site.

**Block:** When clicked, the program prevents your browser from returning cookies.

Permit: When clicked, the program permits your browser to return cookies

Reply: When clicked, the program returns the string specified in the Cookie box instead of the cookie.

If the Use These Rules For <site> check box is unchecked, the Cookies settings are unavailable. In this case, a message below the Use These Rules For <site> check box indicates how the program is determining which privacy rules to use.

If you chose to replace the Referer field information with a Reply, type the string that you want to use for the reply. This string will be sent as the content of the Referer field each time the site requests data from a server.

This Referer Reply box is only available when you click Reply in the Referer list box.

These settings specify whether third-party sites are provided with the identity of the site that triggered a request for data from their server:

**Block:** When clicked, the program prevents your browser from identifying the site you were visiting.

Permit: When clicked, the program permits your browser to identify the site you were visiting.

**Reply:** When clicked, the program returns the string specified in the Referer box instead of the identity of the site you were visiting.

If the Use These Rules For <site> check box is unchecked, the Referer settings are not available. In this case, a message below the Use These Rules for <site> check box indicates how the program determines which privacy rules to use.

When clicked, a notification icon displays in the Status window when a network communication event matches this rule.

If you want to limit the frequency with which a rule match triggers notification on the Status window, increase the Log Event After <n> Matches setting.

**Note:** This setting is unavailable if event logging for this rule is disabled. To enable event logging, click the Write An Event Log Entry When This Rule Is Matched check box.

Lets you limit the frequency with which a rule match triggers a log event.

Specify the number of times a network communication event should match this firewall rule before a firewall event is logged or a Status window notification occurs. The program counts how many times the rule is matched and writes a log event when the count reaches the number that you enter here.

Specifies that an entry is logged to the firewall event log when network communication of the type described by the rule occurs.

Use the Log Event After <n> Matches setting to control how often an event is logged for this rule.

Specifies that you want the whole string that is shown in the box to be added to the block list for the identified site.

Specifies that you want only the part of the string that is highlighted in the box to be added to the block list for the identified site.

Shows you the HTML string that you put into the trashcan.

Examine the string and consider whether it will accomplish the type of blocking you want.

To use the entire string as a block list entry, click Add the whole string to the block list.

To use only a portion of the HTML string as a block list entry, select the portion you want. Then, click Add the portion of the string highlighted below to the block list.

Shows you the HTML string that you put into the trashcan and indicates whether the string would be added to the block list for a specific site or for all sites.						

Click to move a rule up in the list. Firewall rules are processed in the order in which they are listed.

Click to move a rule down in the list. Firewall rules are processed in the order in which they are listed.

Click to stealth blocked ports so they do not respond at all to inquiries from the Internet.