Symantec Web Gateway Version 5.0 Implementation Guide



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Documentation version: 5.0

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North America and Latin America	supportsolutions@symantec.com

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Chapter

Introducing Symantec Web Gateway

This chapter includes the following topics:

- About Symantec Web Gateway
- What's new
- What you can do with Symantec Web Gateway
- Where to get more information

About Symantec Web Gateway

Symantec Web Gateway is an innovative Web security gateway appliance that protects organizations against Web threats, which include malicious URLs, spyware, botnets, viruses, and other types of malware. Symantec Web Gateway provides controls for Web content and Internet applications. Backed by the Symantec Global Intelligence Network, Symantec Web Gateway is built on a scalable platform that quickly and simultaneously scans for malware and inappropriate Web content. Symantec Web Gateway helps organizations to maintain critical uptime and employee productivity by blocking attacks.

Symantec Web Gateway contains the following key features:

- Fast protection at the Web gateway across multiple protocols for inbound and outbound web traffic
- Protection against malware threats on all Web file transfer channels
- Ability to inspect for, detect, and block active and dormant botnets
- URL filtering with flexible policy controls and in-depth reporting (the URL filtering license is required)

14 | Introducing Symantec Web Gateway What's new

- Advanced application control capabilities with ability to monitor and control usage by end-users spanning multiple applications
- Detection of compromised endpoints by network fingerprinting and behavioral modeling
- Comprehensive Web reporting and alerting
- Flexible policy controls, which allow policy creation on Web-based criteria and control over of how policies are applied across an organization
- SSL-encrypted network traffic monitoring for URL content filtering, blacklisted-domain matching, and malware
- Adaptability to deploy as an appliance or as a virtual machine on VMware ESX/ESXi 4.1/4.0
- Integration with Symantec Data Loss Prevention to discover, monitor, and protect confidential data

Symantec Web Gateway provides the following key benefits:

Symantec AntiVirus Engine, the winner of over 40 consecutive VB100 Awards since 1999

Insight is a Symantec reputation-based technology that can flag probable malware not previously known to Symantec.

- Highly scalable technology to meet the needs of any size organization without added latency, which ensures minimal affect on user browsing performance
- The Symantec Global Intelligence Network, which continuously collects data and provides the data to Symantec Web Gateway
 The Symantec Global Intelligence Network encompasses some of the most extensive sources of Internet threat data in the world. Symantec Web Gateway uses this threat data to offer comprehensive and up-to-date protection against the latest threats.

What's new

Table 1-1 describes the major new features or enhancements since Symantec WebGateway 4.5.

New feature or enhancement	Description
Insight reputation-based security	Insight is Symantec's exclusive reputation-based security technology. Insight leverages the anonymous software adoption patterns of over 175 million contributing Symantec users to automatically identify and block new malicious software.
	See "About Insight reputation-based security" on page 101.
Symantec Data Loss Prevention integration	You can route outbound HTTP/HTTPs traffic through a Symantec Data Loss Prevention server to discover, monitor, and protect confidential data.
	See "Specifying a Symantec Data Loss Prevention server" on page 85.
HTTPS decryption	Symantec Web Gateway can check SSL-encrypted network traffic for URL content filtering, blacklisted-domain matching, and malware detection. SSL-encrypted network traffic can also be routed to and inspected by Symantec Data Loss Prevention.
	See "Configuring the Symantec Web Gateway proxy for SSL Deep Inspection" on page 83.
Virtual deployments	Symantec Web Gateway Virtual Edition runs as a virtual machine on VMware ESX/ESXi 4.1/4.0 so that you can run Symantec Web Gateway on the hardware of your choice.
	See "About Symantec Web Gateway Virtual Edition" on page 65.
Integrated proxy	The Symantec Web Gateway proxy can perform as a traditional FTP, HTTP, HTTPS, and SOCKS proxy. The Symantec Web Gateway proxy also enables HTTPS decryption and Symantec Data Loss Prevention integration.
	See "About the Symantec Web Gateway proxy" on page 75.
Full configuration backup and restore	You can schedule automatic, encrypted backups of Symantec Web Gateway policies and configuration.
	See "About backing up and restoring the Symantec Web Gateway configuration" on page 151.

 Table 1-1
 What's new in Symantec Web Gateway

What you can do with Symantec Web Gateway

Table 1-2 describes what you can do with Symantec Web Gateway.

Tasks	Description
Protect computers from spyware, botnets, and viruses	Symantec Web Gateway detects and blocks malware from Web sites and Internet downloads. Symantec Web Gateway must be installed in the inline network configuration or as a proxy server to block downloads. See "Configuring policies for malware" on page 106.
Block selected Internet applications by category	You can configure Symantec Web Gateway to prevent peer-to-peer sharing, streaming media, games, and other Internet applications from accessing the Internet. See "Configuring policies for Internet applications" on page 109.
Block select Web sites	Symantec Web Gateway can block individual Web sites or categories of Web sites. To block Web sites by category, you must have the URL filtering license. See "Configuring URL filtering policies for Web sites" on page 116.
Display reports	You can display reports on a wide range of statistics. Available reports include most accessed Web sites, most active users, infected clients, most common malware, network attacks, and infection sources. Click a statistic in a report to get more information about that user, computer, Web site, category, and so on. See "About reports" on page 163.
Configure alerts	Symantec Web Gateway can issue alerts for attacks, infections, and system events. Symantec Web Gateway transmits alerts by email, syslog, or SNMP. See "About alerts" on page 149.
Quarantine infected computers	Symantec Web Gateway can automatically block inbound and outbound Internet access for infected computers to prevent malware from spreading. See "Quarantining infected computers" on page 129.

Table 1-2What you can do with Symantec Web Gateway

Tasks	Description
Integrate with Symantec Data Loss Prevention	Symantec Web Gateway can pass outbound Web traffic through Symantec Data Loss Prevention to protect your company's data assets. You must have a separate Symantec Data Loss Prevention appliance. See "Specifying a Symantec Data Loss Prevention server" on page 85.
Inspect SSL-encrypted Internet traffic	Symantec Web Gateway can monitor SSL-encrypted Internet traffic for malware or pass the encrypted traffic to Symantec Data Loss Prevention. You must have a separate Symantec Data Loss Prevention appliance to analyze SSL-encrypted traffic for data loss. See "Configuring the Symantec Web Gateway proxy for SSL Deep Inspection" on page 83.

Table 1-2What you can do with Symantec Web Gateway (continued)

Where to get more information

Table 1-3 provides sources where you can get more information about SymantecWeb Gateway.

Table 1-3	More information about Symantec Web Gateway	
Source	Description and location	
Documentation	The Symantec Web Gateway documentation set consists of the following materials:	
	 Symantee Web Gateway Implementation Guide Svmantee Web Gateway Getting Started Guide 	
	Symantec Web Gateway Release Notes	
Product Help system	Symantec Web Gateway includes a comprehensive Help system.	

18 | Introducing Symantec Web Gateway Where to get more information

Table 1-3	More information about Symantec Web Gateway (continued)
Source	Description and location
Symantec Web site	Visit the following Symantec Web sites for more information about Symantec Web Gateway:
	 Knowledge base articles Articles to help you troubleshoot issues with Symantec Web Gateway www.symantec.com/business/support/index?page=landing&key=58161 SymConnect Forum Users post the questions that other users and Symantec Technical Support answer www.symantec.com/connect/security/forums/web-gateway Product alerts Subscribe to late-breaking news about new releases and hot issues http://www.symantec.com/business/support/ index?page=content&key=58161&channel=ALERTS English PDF document for Symantec Web Gateway in English www.symantec.com/business/support/ index?page=content&key=58161&channel=DOCUMENTATION Technical Support Contact information and downloads www.symantec.com/enterprise/support Licensing Information about how to register, activate, and manage existing license https://licensing.symantec.com/acctmgmt/index.jsp Virus encyclopedia Information about all known threats; information about hoaxes and access to white papers about threats www.symantec.com/business/security_response/index.jsp Documentation about data loss prevention Information about data loss prevention Source Data Loss Prevention Administration Guide, which available with the download of the Symantec Data Loss Prevention software.

Chapter

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Planning for installation

This chapter includes the following topics:

- Preinstallation checklist
- System requirements
- About Symantec Web Gateway network configurations
- About the Symantec Web Gateway operating modes
- Port connections for typical network configurations
- Diagrams of typical network configurations
- Ports and settings that Symantec Web Gateway uses
- Connections, ports, and indicators on the Symantec Web Gateway appliance

Preinstallation checklist

 Table 2-1 contains the decisions that you should make and the items that you should have on hand before you install Symantec Web Gateway.

Table 2-1Preinstallation checklist

Item	Description
Review the system requirements.	Ensure that you have met all of the system requirements.
	See "System requirements" on page 23.

Item	Description		
Determine if you intend to use the Symantec Web Gateway proxy.	The use of the Symantec Web Gateway proxy dictates which operating modes you can use and requires you to use the management port.		
	See "About the Symantec Web Gateway proxy" on page 75.		
Determine how you want to install Symantec Web Gateway in your	The manner in which you connect to your network affects its capabilities.		
network.	See "About Symantec Web Gateway network configurations" on page 24.		
	See "Port connections for typical network configurations" on page 27.		
	See "Diagrams of typical network configurations" on page 28.		
Determine which operating mode you intend to use.	The operating modes let you either monitor Internet traffic or monitor traffic and block traffic.		
	See "About the Symantec Web Gateway operating modes" on page 26.		
Configure your firewall to allow traffic from Symantec Web Gateway.	Ensure that the necessary ports are open in your firewall and other network devices to allow Symantec Web Gateway to function properly.		
	See "Ports and settings that Symantec Web Gateway uses" on page 35.		
Have a computer with an Ethernet port for initial setup.	Connect a computer to the management port on Symantec Web Gateway to initially configure it. Any		
(Required for physical appliance only.)	computer and operating system works for this purpose. This computer must have a supported Web browser to access the Web GUI.		
	See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.		
	See "System requirements" on page 23.		
Decide on an administrator user name and password.	Decide on an administrator name and password for access to the Web GUI. The primary administrator can create additional administrator accounts for access to the Web GUI.		

Table 2-1	Preinstallation of	checklist	(continued)
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Item	Description	
Decide on an email address.	Specify an email address in the setup wizard. Symantec Web Gateway sends alerts and reports to this email address. If you click the Forgot Password? link on the Logon page, and Symantec Web Gateway sends a new password to this address.	
Have your license file in an accessible location.	A Symantec license file typically has the extension .slf. When you register your software license, Symantec emails you a license file. Put the license file in a location that is accessible from the computer on which you plan to run the setup wizard. Symantec provides a two week grace period with Symantec Web Gateway functionality if you run the setup wizard without a license.	
	The following types of licenses are available for Symantec Web Gateway:	
	 Symantec Web Gateway license file The Symantec Web Gateway license enables Symantec Web Gateway to detect spyware, viruses, botnet infections, enforce application control, and enable Insight reputation-based security. URL filtering license file In addition to the features in the Symantec Web Gateway license, the URL filtering license lets you monitor or block access to Web pages based on categorization. 	

Table 2-1Preinstallation checklist (continued)

Item	Description		
Know your IP address and related network settings for the Symantec Web Gateway appliance.	Determine if you intend to use a single IP address or two IP addresses.		
	With one IP address, you can use a static address or you can rely on DHCP. Symantec recommends that you use a static IP address.		
	The two IP address configuration is recommended if you plan to connect Symantec Web Gateway in the inline network configuration. Symantec Web Gateway requires two IP addresses if you intend to install Symantec Web Gateway in a proxy configuration. The IP addresses must be static and in different subnets.		
	In the two IP address configuration, Symantec Web Gateway uses one IP address for communication with the Web GUI through the management port. Symantec Web Gateway uses the other IP address for communication with the user. For example, Symantec Web Gateway uses this IP address to send the end user blocking pages and authentication requests. The two IP addresses must be on different networks.		
	To specify a static IP address for Symantec Web Gateway, obtain an IP address in your network that is not in use by another computer.		
	You need the following network settings for a static IP address:		
	 IP address Subnet mask Default gateway Primary DNS Secondary DNS (optional) DNS suffix (optional) 		

Table 2-1 Preinstallation checklist (continued)

Item	Description
Know your external proxy information. (Optional)	An external proxy is not required for Symantec Web Gateway to function. However, if Symantec Web Gateway uses an external proxy or users access the Internet through an external proxy, you must specify the following information:
	 Proxy IP address and port for Symantec Web Gateway to use for Internet access The external proxy must permit access to the Internet without the need for authentication. HTTP proxy ports that users use to access the Internet
Know your DNS IP address and suffix. (Optional)	If you intend to use DNS, you must provide a DNS address. Optionally, you can provide a second DNS address and a DNS suffix.
Have a list of your internal subnets.	You must specify your internal subnets in Symantec Web Gateway after you run the setup wizard. See "Post-installation tasks" on page 50.
Have up to five normal and two crossover Ethernet cables.	You need up to four normal and up to two crossover Ethernet cables. The number of cables that you need depends on your network configuration and the number of LAN and WAN ports on the appliance. Crossover Ethernet cables are included with your appliance. The Ethernet cables should have the typical RJ-45 (8P8C) jacks.
	See "Port connections for typical network configurations" on page 27.
	See "Diagrams of typical network configurations" on page 28.

Table 2-1Preinstallation checklist (continued)

After you complete the preinstallation checklist, you can proceed with the installation.

See "Installing Symantec Web Gateway" on page 44.

System requirements

Table 2-2 lists the supported system requirements.

24 | Planning for installation About Symantec Web Gateway network configurations

Requirement	Description
Appliance	You can run this release of Symantec Web Gateway on any of the following appliance models:
	Symantec Web Gateway model 8490
	■ Symantec Web Gateway model 8450
	■ 007
	■ 009
Web browser	The following are the Web browser requirements:
	Computer that you use to access the Symantec Web Gateway
	Web GUI:
	 Microsoft internet explorer 8/7/6 Mozilla Firefox 2
	 Mozina Filetox 5 Client computers:
	 Microsoft Internet Explorer 8/7/6
	 Mozilla Firefox 3
	In most cases, Symantec Web Gateway does not require changes to any user software including the Web browser. However, if you configure Active Directory integration to use NTLM 401 authentication (only used in inline or tap network configurations), you may have to change the Web browser configuration on user computers. This change prevents an authentication pop-up window. You may also have to change the Web browser configuration on user computers if you use the Symantec Web Gateway proxy.
	See "Web browser changes needed for NTLM" on page 187.
	See "Required Web browser settings for the Symantec Web Gateway proxy" on page 78.

 Table 2-2
 Symantec Web Gateway system requirements

See "System requirements for Symantec Web Gateway Virtual Edition" on page 70.

About Symantec Web Gateway network configurations

Symantec Web Gateway offers a variety of ways that you can set up the product in your network. After you determine the network configuration that you want to use, you can determine the operating mode that best suits your needs.

See "About the Symantec Web Gateway operating modes" on page 26.

Table 2-3 describes the ways to connect Symantec Web Gateway to your network.

Network configuration	Description
Port span/tap	Blocks Web sites and phone-home attempts but cannot block file transfers.
	The port span/tap configuration may be easier to set up because it only requires one connection to your LAN. This configuration is useful as an initial test of Symantec Web Gateway.
	See Figure 2-7 on page 35.
	See "Download behavior in user Web browsers" on page 93.
Inline	Blocks file transfers, Web sites, and phone-home attempts.
	Inline configuration requires more network connections than port span/tap.
	See Figure 2-1 on page 29.
Proxy	Only analyzes the proxy traffic that is explicitly proxied to Symantec Web Gateway proxy.
	This means that Symantec Web Gateway can only analyze HTTP, HTTPS, FTP, and SOCKS Internet traffic. This configuration requires changes in your network to ensure that users' browsers use the Symantec Web Gateway proxy to access the Internet.
	See Figure 2-4 on page 32.
	See "Required Web browser settings for the Symantec Web Gateway proxy" on page 78.
Inline + proxy	A combination of both the inline network configuration and the proxy network configuration.
	Symantec Web Gateway can explicitly analyze both the proxy traffic and native traffic that pass through the WAN/LAN ports.
	See Figure 2-1 on page 29.
	See "Required Web browser settings for the Symantec Web Gateway proxy" on page 78.

Table 2-3Symantec Web Gateway network configurations

Table 2-5 Synance web dateway network configurations (continued)			
Network configuration	Description		
Inline and inline + proxy dual homing	Works the same as the inline configuration and the inline + proxy configuration but this configuration contains a second set of LAN and WAN ports.		
	In an inline configuration, Symantec Web Gateway supports both of the LAN ports and WAN ports. In an inline + proxy configuration, Symantec Web Gateway only supports proxy function on LAN1 and WAN1 ports.		
	Symantec Web Gateway only supports dual homing on the 8490 appliance.		
	See Figure 2-3 on page 31.		

Table 2-3Symantec Web Gateway network configurations (continued)

See "Port connections for typical network configurations" on page 27.

About the Symantec Web Gateway operating modes

The mode that you choose defines Symantec Web Gateway's default behavior. You can override the default settings when you configure policies.

Table 2-4 describes the modes that are available for Symantec Web Gateway.

Mode	Description
Blocking	 Based on the network configuration, Symantec Web Gateway can block Web sites, phone-home attempts, and file downloads. When in blocking mode, Symantec Web Gateway also provides the same reports on user activity as it does in monitoring mode. You must install Symantec Web Gateway in the inline network configuration to block file transfers. See "About Symantec Web Gateway network configurations" on page 24.
Monitoring	Symantec Web Gateway does not block any Internet traffic, but it provides reports on user activity. This mode can be useful as an initial test of Symantec Web Gateway.

Table 2-4Symantec Web Gateway operating modes

See "Download behavior in user Web browsers" on page 93.

Port connections for typical network configurations

Table 2-5 describes the port connections for typical network configurations.

See "Diagrams of typical network configurations" on page 28.

Note: You may need to use a crossover Ethernet cable for the connection from the Symantec Web Gateway LAN port to the LAN switch.

See "About ensuring Internet connectivity if Symantec Web Gateway is disabled" on page 54.

Network configuration	Description	Connect Management to	Connect Monitor to	Connect LAN to	Connect WAN to
Port span/tap	Simple port span/tap network configuration. See Figure 2-1 on page 29.	Port on your LAN switch (required)	Network tap or a port on your LAN switch that is set to span mode (required)	Port on your LAN switch (optional)	Not used
Simple inline with no proxy or the proxy is at the firewall	Simple inline network configuration. If a proxy exists in the network, it is connected to the firewall. See Figure 2-1 on page 29.	Port on your LAN switch (required)	Not used	Port on your LAN switch (required)	Internet firewall LAN port (required)
Inline with two firewalls and two Symantec Web Gateway appliances	You can connect two Symantec Web Gateway appliances to two firewalls as part of a high-availability environment. You can configure the firewalls in active/active failover or active-standby failover. You should configure the Symantec Web Gateway appliances identically except for the network settings. See Figure 2-2 on page 30.	Port on your LAN switch (required)	Not used	Port on your LAN switch (required)	Internet firewall LAN port (required)

Table 2-5Port connections for typical network configurations

Network configuration	Description	Connect Management to	Connect Monitor to	Connect LAN to	Connect WAN to
Inline with one NIC external proxy that is connected to Symantec Web Gateway	If your proxy server is connected to the corporate LAN rather than the firewall, install Symantec Web Gateway between the corporate LAN and the proxy server. See Figure 2-6 on page 34.	Port on your LAN switch (required)	Not used	Port on the proxy (required)	Port on your LAN switch (required)
Inline with two NIC external proxies that are connected twice to dual-homed Symantec Web Gateway	For greater throughput on the proxy server, you can connect a single Symantec Web Gateway appliance with two LAN and two WAN ports to a proxy server. You can also connect a single Symantec Web Gateway appliance with two LAN and two WAN ports to two proxy servers. See Figure 2-3 on page 31.	Port on your LAN switch (required)	Not used	Port on the proxy; connect LAN2 to the proxy also (required)	Port on your layer 3 switch; connect WAN2 to a separate layer 3 switch (required)
Inline with two NIC external proxies that are connected to Symantec Web Gateway and to the firewall	The proxy server is connected to the firewall and Symantec Web Gateway. See Figure 2-5 on page 33.	Port on your LAN switch (required)	Not used	Port on your LAN switch (required)	Port on the proxy (required)
Central Intelligence Unit	An appliance that is configured to manage other appliances is called a Central Intelligence Unit.	Port on your LAN switch (required)	Not used	Not used	Not used

Table 2-5	Port connections for typical network configurations (c	continued)
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Diagrams of typical network configurations

The following are diagrams of typical network configurations.

See "Port connections for typical network configurations" on page 27.



Figure 2-1Simple inline or inline + proxy network configuration



Figure 2-2Inline with two firewalls, two external proxies, and two Symantec
Web Gateway appliances



Figure 2-3 Inline with dual-homed Symantec Web Gateway inline







Inline with an external proxy server



Ports and settings that Symantec Web Gateway uses

Ports and URLs used for communications are useful in preparation of firewall for Symantec Web Gateway installation or troubleshooting communication problems.

Table 2-6 describes the ports that Symantec Web Gateway uses.

URL	Port (Protocol)	From	То	Description
<hostname ip=""></hostname>	TCP/25 (SMTP)	Symantec Web Gateway	User-defined SMTP mail servers	Delivers the SMTP notifications of alert conditions.
<hostname ip=""></hostname>	UDP/53 (DNS)	Symantec Web Gateway	User-defined DNS servers	(Optional) Performs external DNS lookups, if configured.

Table 2-6Symantec Web Gateway ports and settings

URL	Port (Protocol)	From	То	Description
liveupdate.symantec.com liveupdate.com symantecliveupdate.com	TCP/80 (HTTP)	Symantec Web Gateway	Symantec LiveUpdate servers	Supplies the antivirus definitions downloads.
<hostname ip=""> pool.ntp.org (default)</hostname>	UDP/123 (NTP)	Symantec Web Gateway	User-defined NTP servers	Retrieves Network Time Protocol data from one or more Time servers.
<hostname ip=""></hostname>	UDP/161 (SNMPv3)	Symantec Web Gateway	User-defined SNMP servers	(Optional) Provides the Simple Network Management Protocol (SNMP) trap and alerts, if configured.
<hostname ip=""></hostname>	TCP/389 (domain controller) or TCP/3268 (Global Catalog)	Symantec Web Gateway	Active Directory servers	(Optional) Retrieves LDAP User information from Active Directory server, if configured.

Table 2-6Symantec Web Gateway ports and settings (continued)
URL	Port (Protocol)	From	То	Description
threatcenter.symantec.com	TCP/443 (HTTP)	Symantec Web Gateway	Symantec Threat center servers	This port enables the following:
				 Symantec Web Gateway software update downloads, botnet signatures, and other updates. Symantec Technical Support may use this port for remote system diagnosis.
filterdb.iss.net	TCP/443 (HTTP)	Symantec Web Gateway	URL filter distribution servers	(Optional) Downloads optional URL filtering data.
license.cobion.com	TCP/443 (HTTP)	Symantec Web Gateway	URL filter licensing servers	(Optional) Validates your software license for URL classification data.
<hostname ip=""></hostname>	TCP/443 (Proprietary)	Central Intelligence Unit (CIU)	Symantec Web Gateway	(Optional) Polls Symantec Web Gateway for its status and data.

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Table 2-6	Symantec web	Gateway ports and	settings (continuea)

URL	Port (Protocol)	From	То	Description
<hostname ip=""></hostname>	TCP/443 (Proprietary)	Symantec Web Gateway	CIU	(Optional) Retrieves updates to configuration options from CIU.
<hostname ip=""></hostname>	UDP/514 (Syslog)	Symantec Web Gateway	User-defined syslog servers	(Optional) Delivers malware alerts or system alerts to remote syslog, if configured.
<ip address,="" as="" configured<br="">in dcinterface.txt></ip>	TCP/60517 (Proprietary)	Symantec Web Gateway	dc interface	(Optional) Forwards audit success entries from the security log of the domain controller to Symantec Web Gateway, which permits Symantec Web Gateway to apply filtering policies based on LDAP.
<401 authentication port>	TCP/20200	Endpoint computer	Symantec Web Gateway	(Optional) Symantec Web Gateway to authenticate end user clients.
<symantec prevent<br="" web="">communication channel></symantec>	ICAP/1344	Symantec Web Gateway	Symantec Web Prevent communication channel	(Optional) Used to communicate with the Symantec Web Prevent server.

Table 2-6Symantec Web Gateway ports and settings (continued)

Note: <hostname/IP> denotes the configuration that you provide based upon your local network architecture and your implementation plan for Symantec Web Gateway

Table 2-7 describes the proxy settings that Symantec Web Gateway uses.

Settings	Port	From	То	Description
SOCKS Settings	1080	Web browser client	Symantec Web Gateway	You can enable Symantec Web Gateway proxy as SOCKS proxy for TCP and for UDP network traffic such as HTTP and FTP. Symantec Web Gateway supports the following SOCKS version 5. The default port is 1080, and you can modify as per your network configuration.
FTP Settings	8021	FTP client	Symantec Web Gateway	The proxy listens for FTP traffic at the port that you specify. The default port is 8021,and you can modify as per your network configuration.

Table 2-7Symantec Web Gateway proxy settings

40 | Planning for installation Ports and settings that Symantec Web Gateway uses

Settings	Port	From	То	Description
HTTP/S Proxy Settings	8080-8083	Web browser client	Symantec Web Gateway	The proxy listens for HTTP/S traffic from the user Web browser at the specified ports. The default port ranges from 8080-8083, and you can modify as per your network configuration. These ports can only be used for the HTTP/S proxy.
SSL Deep Inspection Settings	8443	Web browser client	Symantec Web Gateway	The Symantec Web Gateway proxy listens for SSL traffic at the port that you specify. If you enable the internal HTTP/S proxy, the SSL port must be different than the HTTP/S ports. The default port is 8443, and you can modify as per your network configuration.

Table 2-7Symantec Web Gateway proxy settings (continued)

Connections, ports, and indicators on the Symantec Web Gateway appliance

The connections and ports on the back of the appliance that you need to configure Symantec Web Gateway are labeled. Connections that are not labeled are not functional or are not supported. Two solid (not blinking) LEDs indicate bypass mode is enabled.

 Table 2-8 explains the connections and ports on Symantec Web Gateway appliances.

Connection or port	Description	
USB ports	You can use this port to attach a keyboard to use for the command line interface.	
Serial port	Connect the serial port to another computer to access the Serial Console character-based interface.	
	See "Port connections for typical network configurations" on page 27.	
LAN Ethernet port	Depending on how you deploy Symantec Web Gateway, you may connect the LAN port to your LAN switch.	
WAN Ethernet port	Depending on how you deploy Symantec Web Gateway, you may connect the WAN port to your firewall.	
Management (Mgmt) Ethernet port	 Connect the management port to your LAN switch. The management port must have access to the following: Domain Name Server (DNS) Access to the required Internet services See "Ports and settings that Symantec Web Gateway uses" on page 35. Domain controller (for authentication) See "Port connections for typical network configurations" on page 27. 	
Monitor Ethernet port	If you deploy Symantec Web Gateway in a port span/tap network configuration, connect the monitor port to the network tap or a port on your LAN switch that is set to span mode. See "Port connections for typical network configurations"	
	on page 27.	

Table 2-8Connections and ports on Symantec Web Gateway appliances

42 | Planning for installation Connections, ports, and indicators on the Symantec Web Gateway appliance

Table 2-8	Connections and ports on Symantec Web Gateway appliances
	(continued)

Connection or port	Description
Keyboard	You can use this connection to attach a keyboard to use for the command line interface.
Mouse	This connection is not functional.
Power	This connection provides power to the appliance. Your appliance may have an extra, redundant power connection.

Chapter

Installing Symantec Web Gateway

This chapter includes the following topics:

- Installing Symantec Web Gateway
- Installing the Symantec Web Gateway appliance into a rack
- Configuring a computer to access Symantec Web Gateway for installation
- Running the setup wizard
- Post-installation tasks
- Accessing the Web GUI
- Connecting Symantec Web Gateway to your network
- About ensuring Internet connectivity if Symantec Web Gateway is disabled
- Testing the bypass mode
- Specifying internal networks
- Enabling URL filtering, Internet program monitoring, and other features
- Creating static routes for the inline network configuration
- Specifying a mail server for alerts and reports
- Specifying internal email and external proxy servers for report accuracy
- Testing Symantec Web Gateway for successful blocking or monitoring
- Testing Symantec Web Gateway Threat Center connectivity

■ Running the setup wizard after initial installation

Installing Symantec Web Gateway

Before you install Symantec Web Gateway, ensure that you complete all of the items on the preinstallation checklist.

See "Preinstallation checklist" on page 19.

 Table 3-1 describes the steps to install and initially configure Symantec Web

 Gateway.

Step	Action	Description
Step 1 Mount the appliance.	Mount the Symantec Web Gateway appliance into a rack, but do not connect the Ethernet cables yet.	
		See "Installing the Symantec Web Gateway appliance into a rack" on page 45.
Step 2	Configure and connect a computer to Symantec Web Gateway for initial installation.	You use a directly connected computer to initially configure Symantec Web Gateway. See "Configuring a computer to access Symantec Web Gateway for installation" on page 45.
Step 3	Run the setup wizard.	You specify the primary administrative user, network configuration, and initial settings for Symantec Web Gateway in the setup wizard.
		See "Running the setup wizard" on page 46.

Table 3-1Steps to install Symantec Web Gateway

When you finish the installation, perform the post-installation tasks to ensure that you properly configure and test Symantec Web Gateway.

See "Post-installation tasks" on page 50.

Installing the Symantec Web Gateway appliance into a rack

You can mount the Symantec Web Gateway appliance into a 19-inch (483mm) rack. If you do not have a rack, the Symantec Web Gateway appliance can rest on a stable surface.

After you install the appliance into a rack, configure a computer to access the setup wizard next. But do not connect the Ethernet cables yet.

See "Configuring a computer to access Symantec Web Gateway for installation" on page 45.

To install the Symantec Web Gateway appliance into a rack

- **1** Attach the included rails to the appliance.
- 2 Install the appliance in a 19-inch (483mm) rack.
- **3** Connect the power cord to the appliance and then to a power supply.
- 4 If your appliance came with two power cords, connect the second power cord.

Configuring a computer to access Symantec Web Gateway for installation

You must connect a computer to the management port to initially set up Symantec Web Gateway. You must also configure the IP address and netmask of that computer.

After you install Symantec Web Gateway, you can access it from a browser on any computer in your network. You can also disconnect the computer from the management port and reconfigure the network settings as desired.

The exact method to use to configure the computer network settings depends on the operating system. For example, on Windows XP, access **Network Connections** on the **Control Panel**. Access the properties of the **Local Area Connection** and then access the properties of **Internet Protocol (TCP/IP)**.

For more information about how to configure your computer network settings, see your operating system documentation.

After you configure a computer to access Symantec Web Gateway for installation, run the setup wizard.

See "Running the setup wizard" on page 46.

To configure a computer to access Symantec Web Gateway for installation

- 1 Copy the license file to the local hard drive on the computer.
- 2 Access the network configuration settings on the computer.
- **3** Set the IP address of the computer to the following address: 192.168.254.253
- 4 Set the subnet mask of the computer to the following address:

255.255.255.0

You do not have to configure any other network settings such as default gateway or DNS.

- 5 Save the settings.
- **6** Connect an Ethernet cable from this computer to the management port on the back of the Symantec Web Gateway appliance.

Running the setup wizard

After you physically install Symantec Web Gateway and connect a computer to the management port, you can run the setup wizard. This procedure describes how to configure an appliance as a Web Gateway, not as a Central Intelligence Unit.

See "Installing a Central Intelligence Unit" on page 196.

When installation completes the Symantec Web Gateway services restart. The appliance does not restart.

To run the setup wizard

1 Press the power button on the front of the Symantec Web Gateway appliance.

The appliance takes several minutes to start.

2 On the computer that is connected to the management port, start a Web browser and go to the following URL:

http://192.168.254.254

The setup wizard automatically appears the first time that you install the product.

- 3 On the Welcome panel, click Next.
- 4 On the **License Agreement** panel, read the license agreement, check the box indicating that you accept the terms of the agreement, and then click **Accept**.
- 5 On the Install License panel, do the following tasks:

- In the **Company Name** box, type the name of your organization.
- Click **Browse** and locate your license file.
- Click Next.

If you do not install a license now, there is a two week grace period. During this time the product runs as if the Symantec Web Gateway license were installed.

6 On the Select Server Type panel, click Web Gateway, and then click Next.

You can only change the server type in the setup wizard. You cannot change it in the Web GUI after the setup wizard finishes.

See "Running the setup wizard after initial installation" on page 63.

7 On the **User Information** panel, specify the following information about the primary Web GUI system user:

Login Name	Type a login name for the primary Web GUI administrator. Use ASCII characters only. The login name is case sensitive.
Password	Type a password for the primary Web GUI administrator.
Reenter password	Type the password again to verify its accuracy.
Description (Optional)	Optionally, you can type a description for the current user account. This description appears on the Edit User page.
Email Address	Type a complete email address such as admin@symantecs.org. Symantec Web Gateway sends alerts and reports to this email address. If you click the Forgot Password? link on the login page, a new password is sent to this address.

8 Click Next.

Name

9 On the **Server Information** panel, specify the following information:

Type a descriptive name for Symantec Web Gateway with ASCII characters. The server name can include spaces. The server name is not used for network access to Symantec Web Gateway. It appears in reports and alerts. If you use a Central Intelligence Unit to manage multiple Symantec Web Gateway appliances, this name identifies each Symantec Web Gateway appliance. Mode

Select one of the following default operating mode options:

Monitoring

Click this option if you only want to view reports on user malware activity but not block malware.

Blocking

Click this option if you want to block inbound and outbound malware for user computers at your site. You can also view reports on malware activity. You can override these default operating modes with custom policies.

Symantec recommends that you do not use Blocking mode, if you use the Inline configuration and you do not have static routes configured.

See "About the Symantec Web Gateway operating modes" on page 26.

Select one of the following network configurations:

- Port span/tap
- Inline
- Proxy
- Inline + Proxy

See "About Symantec Web Gateway network configurations" on page 24.

Network Settings

Do the following tasks:

- To specify one IP address for the Web GUI and a separate IP address for the monitoring and blocking capabilities of Symantec Web Gateway, check Enable separate management and inline networks.
- Specify if you want to use Automatic (DHCP) resolution or if you want to manually specify IP addresses. Symantec Web Gateway does not support DHCP when you enable separate management and inline networks.
- If you did not check Enable separate management and inline networks, specify the Management Network Settings.

Specify the IP address and related network settings for the Web GUI, monitoring capabilities, and blocking capabilities.

- If you checked Enable separate management and inline networks, specify the following settings:
 - Management Network Settings Specify the IP address and related network settings for the Web GUI. The use of DHCP is disabled.
 - Inline Network Settings Specify the IP address and related network settings for the monitoring and blocking
 - capabilities.
 - DNS Settings

You can specify up to two IP addresses. You can optionally also specify a DNS suffix.

Specify the following external proxy settings:

- (Optional, if you intend to use Check Use proxy for Web Gateway secure communications (SSL) with Symantec Threat Center if you intend to have Symantec Web Gateway to use an external proxy to communicate with Symantec Threat Center. Also specify the proxy IP address and port.
 - Check Analyze ports used by proxy if you want Symantec Web Gateway to inspect the external proxy traffic from clients. Also specify the HTTP proxy port/port range and the FTP port.

Proxy Settings

external proxies)

Time Zone SettingClick the drop-down list and select your time zone.The time zone settings do not apply if you use
Symantec Web Gateway as a proxy.

10 Click Finish.

11 The Symantec Web Gateway service restarts.

See "Preinstallation checklist" on page 19.

See "Installing Symantec Web Gateway" on page 44.

Post-installation tasks

After you install the appliance and run the setup wizard, perform the following post-installation tasks to ensure that you properly configure and test Symantec Web Gateway.

Step	Task	Description
Step 1	Step 1 Reconnect the Ethernet cable, if required.	If you selected the inline networking configuration., disconnect the Ethernet cable from the management port and connect it to the LAN port on Symantec Web Gateway. You do not need to switch to the LAN port if you use the two IP configuration.
		If Symantec Web Gateway is in bypass mode in this configuration, leave the Ethernet cable connected to the management port to access the Web GUI.
		With all other configurations, leave the Ethernet cable connected to the management port. In all configurations, keep the other end of the cable connected to your computer.

Step	Task	Description
Step 2	Configure Symantec Web Gateway to be able to access the Web GUI from a Web browser through your network.	On the computer that is connected to the management port, set the IP address to an IP address that is on the same network as the new IP address that you specified for Symantec Web Gateway.
		Gateway IP address.
		This process is similar to the process to access the setup wizard, except that you do not use the 192.168.254.253 IP address.
		See "Configuring a computer to access Symantec Web Gateway for installation" on page 45.
Step 3	Access the Web GUI.	Access the Web GUI to test Symantec Web Gateway and to perform post-installation configurations.
		See "Accessing the Web GUI" on page 52.
Step 4	Connecting Symantec Web Gateway to your network.	After you access the Web GUI, you can connect Symantec Web Gateway to your network.
		See "Connecting Symantec Web Gateway to your network" on page 53.
Step 5	Test bypass mode.	If you configure Symantec Web Gateway for the inline configuration, test to ensure that the bypass mode
	(Inline configuration only)	operates properly.
		See "About ensuring Internet connectivity if Symantec Web Gateway is disabled" on page 54.
		See "Testing the bypass mode" on page 56.
Step 6	Specify your internal networks.	When you specify your internal networks, Symantec Web Gateway knows which networks are internal and which are external.
		See "Specifying internal networks" on page 57.

Table 3-2Post-installation tasks (continued)

Step	Task	Description
Step 7	Enable key filtering and monitoring features.	 Configure the following features: Enable Insight reputation-based security See "Enabling Insight reputation-based security" on page 102. Enable application control Enable content filtering Enable record browse view times See "Enabling URL filtering, Internet program monitoring, and other features" on page 58.
Step 8	Create static routes, if needed. (Inline configurations only)	If you plan to connect Symantec Web Gateway in the inline network configuration, specify static routes. See "Creating static routes for the inline network configuration" on page 60.
Step 9	Specify servers and proxies for reports and alerts.	You should specify your servers and external proxies so that they appear in your alerts and reports. See "Specifying a mail server for alerts and reports" on page 60. See "Specifying internal email and external proxy servers for report accuracy" on page 61.
Step 10	Test Symantec Web Gateway.	Test Symantec Web Gateway to ensure that it blocks and monitors Web traffic as you intend it. Also test the connection to the Threat Center. See "Testing Symantec Web Gateway for successful blocking or monitoring" on page 61. See "Testing Symantec Web Gateway Threat Center connectivity" on page 62.

Table 3-2Post-installation tasks (continued)

Accessing the Web GUI

You can use the Web GUI to configure Symantec Web Gateway. Access the Web GUI from a Web browser on any computer in the LAN that is connected to Symantec Web Gateway.

To access the Web GUI

- **1** On the computer in the LAN connected to Symantec Web Gateway, start a Web browser.
- 2 In the Web browser, type the following:

http://IP address

Where *IP address* is the address that you specified for the Symantec Web Gateway appliance in the setup wizard.

For example, if the IP address that you specified for the appliance is 192.168.42.24, go to the following URL:

http://192.168.42.24

3 For certain Web browsers, you may need to configure a certificate security exception to access the Web GUI.

Typically, this step is only required at the first login per computer per session.

Connecting Symantec Web Gateway to your network

After you complete the setup wizard, connect Symantec Web Gateway to your network based on the network configuration and operating mode that you configured during installation. Symantec recommends that you make the connections while the Symantec Web Gateway service is disabled. This way you can test that the bypass mode works while the service is disabled. Symantec Web Gateway only supports bypass mode for inline configurations.

To connect Symantec Web Gateway to your network

1 In the Web GUI, click Administration > Configuration > Operating Mode, uncheck Service Enabled to disable Symantec Web Gateway, and then click Save.

When you disable the service, Symantec Web Gateway is in bypass mode.

See "About ensuring Internet connectivity if Symantec Web Gateway is disabled" on page 54.

You can check the Symantec Web Gateway service status at **Administration** > **Configuration** > **Operating Mode**.

2 Disconnect your computer from the management port of the Symantec Web Gateway appliance.

You can set the TCP/IP configuration of the computer as desired and redeploy it as needed in your network.

3 Connect the LAN, WAN, and management ports as required for the network configuration and mode that you configured.

See "Port connections for typical network configurations" on page 27.

4 With Symantec Web Gateway service disabled, try to access the Internet from a computer in the LAN.

You should be able to access the Internet. The bypass LEDs on the back of the Symantec Web Gateway appliance should be on.

See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.

5 In the Web GUI, click **Administration > Configuration > Operating Mode**, and then check **Service Enabled** to enable Symantec Web Gateway.

See "Post-installation tasks" on page 50.

About ensuring Internet connectivity if Symantec Web Gateway is disabled

When you configure the appliance in the inline network configuration, the appliance enters bypass mode if it cannot function or is turned off. In bypass mode, Symantec Web Gateway routes Internet traffic through the LAN port and the WAN port, but no monitoring or blocking occurs.

Symantec Web Gateway Virtual Edition does not have a bypass mode. For Symantec Web Gateway Virtual Edition with inline configurations, network traffic is halted when the service is disabled or the physical host computer is turned off.

Table 3-3 explains the differences between the hardware bypass mode and software bypass mode.

Hardware bypass mode	Software bypass mode
If the Symantec Web Gateway appliance is turned off, it is called Hardware bypass.	If the Symantec Web Gateway appliance is turned on and the Symantec Web Gateway service is disabled, it is called Software bypass.
Hardware bypass does not generate any reports for scanning, monitoring, and blocking.	Software bypass does not generates reports for scanning, monitoring, and blocking.

Table 3-3 Symantec Web Gateway bypass modes

Hardware bypass mode	Software bypass mode
The WAN, LAN, management port, and monitoring ports are disabled. But traffic still flows through the LAN port and WAN port unimpeded.	The WAN port and LAN port are disabled. Traffic still flows through the LAN port and WAN port unimpeded.

Table 3-3Symantec Web Gateway bypass modes (continued)

For bypass mode to function properly, ensure that you use the proper type of Ethernet cables to connect to the LAN. Two solid LEDs on the back of the Symantec Web Gateway appliances indicate bypass mode is on.

See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.

Note: If you connect the wrong type of Ethernet cable from Symantec Web Gateway to the LAN, Internet connectivity is blocked when Symantec Web Gateway is disabled or off. In bypass mode, Symantec Web Gateway works the same as if you were using a crossover Ethernet cable.

In the inline network configuration, you may need to connect a crossover Ethernet cable between the LAN port on Symantec Web Gateway and the main LAN switch. One or two crossover cables are included with Symantec Web Gateway, depending on the number of LAN ports on your appliance. Most Ethernet cables are straight-through cables.

Table 3-4 describes the cable options for LAN port.

	5
LAN auto sensing behavior	Cable options for Symantec Web Gateway LAN port
The LAN switch that is connected to Symantec Web Gateway has auto sensing that detects the cable type and adjusts to properly route network traffic.	You can connect either a straight-through or a crossover Ethernet cable from the LAN port on Symantec Web Gateway to the main LAN switch. However, Symantec recommends that you install the type of cable that is recommended in the following row. If the LAN switch is unintentionally turned off, auto sensing may not function.

Table 3-4Connecting the LAN cable in the inline network configuration

Fable 3-4 Connecting the LAN cable in the inline network configuration (continued)		
LAN auto sensing behavior	Cable options for Symantec Web Gateway LAN port	
The LAN switch that is connected to Symantec Web Gateway does not have auto sensing and automatic correction for the Ethernet cable type.	 You must connect the correct type of Ethernet cable to ensure that bypass mode works. The type of cable to use depends on the cable that was connected between the WAN and LAN before you installed Symantec Web Gateway, as follows: If the Ethernet cable between the WAN and LAN was a straight-through cable, connect a crossover Ethernet cable to the Symantec Web Gateway LAN port. If the Ethernet cable between the WAN and LAN was a crossover cable, connect a straight-through Ethernet cable to the Symantec Web Gateway LAN port. If the Ethernet cable between the WAN and LAN was a crossover cable, connect a straight-through Ethernet cable to the Symantec Web Gateway LAN port. In all cases, connect a straight-through Ethernet cable from the WAN to the WAN port on Symantec Web Gateway. 	

If you configure Symantec Web Gateway in the port span/tap network configuration and the appliance is turned off or disabled, Internet traffic passes unchanged. In the port span/tap network configuration, the appliance never blocks Internet traffic if it is turned off or disabled. Always use a straight-through Ethernet cable to connect the appliance to the network tap or port that is configured in span mode.

See "Testing the bypass mode" on page 56.

Testing the bypass mode

When you configure the appliance in the inline network configuration, the appliance enters bypass mode if it cannot function or is turned off. In bypass mode, Internet traffic is routed through the LAN port and the WAN port, but no monitoring or blocking occurs. For bypass mode to function properly, ensure that you use the proper type of Ethernet cables to connect to the LAN. LEDs on the back of the Symantec Web Gateway appliances indicate bypass mode if it is not turned off.

To test the bypass mode

1 In the Web GUI, click Administration > Configuration > Operating Mode, and then uncheck Service Enabled to disable Symantec Web Gateway.

When you disable the service, Symantec Web Gateway is in bypass mode.

See "About ensuring Internet connectivity if Symantec Web Gateway is disabled" on page 54.

2 With Symantec Web Gateway service disabled, try to access the Internet from a computer in the LAN.

You should be able to access the Internet. The bypass LEDs on the back of the Symantec Web Gateway appliance should be on but not blinking.

See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.

- **3** Click **Administration > Configuration > Operating Mode**, and then check **Service Enabled** to enable Symantec Web Gateway.
- 4 Test Symantec Web Gateway to ensure that it functions properly.

See "Testing Symantec Web Gateway for successful blocking or monitoring" on page 61.

Specifying internal networks

When you define your internal networks, you specify which computers are part of your network and which computers belong to the world outside. This specification lets Symantec Web Gateway correctly identify computers with malware infections, versus potential attacks from outside the network.

To specify internal networks

- 1 In the Web GUI, click **Administration > Configuration > Network**.
- 2 Check **Apply Static Routes to Internal Networks** if the following conditions apply, and then click **Save** and ignore the rest of this procedure:
 - You have configured static routes.
 - Your internal networks are the same as or more than the static routes.

See "Creating static routes for the inline network configuration" on page 60.

3 Under Internal Network Configuration, click Add a Network.

Normally, do not check **Define internal network as addresses not in the following list**. That setting is for special cases of when you install Symantec Web Gateway in front of an external proxy.

4 In **Subnet**, type the IP address of your internal subnet.

For example, if your internal computers are in the range 10.42.24.0 to 10.42.24.255, type 10.42.24.0.

5 In **Netmask**, type the netmask for the subnet.

For example, if your internal computers are in the range 10.42.24.0 to 10.42.24.255, type 255.255.25.0.

Symantec Web Gateway supports the wide subnets also known as supernets. If portions of your network are in a contiguous wide range, it is not necessary to have multiple separate internal network entries for each range. A single wide range is sufficient.

- **6** Optionally, in **Description**, type a description of the internal network.
- 7 If your internal network has computers in separate network ranges, specify additional networks.
- 8 Click Save.

Enabling URL filtering, Internet program monitoring, and other features

You must enable some features of Symantec Web Gateway for them to function. Alternatively, you can disable the features that you do not use to improve Symantec Web Gateway performance.

To enable URL filtering, Internet program monitoring, and other features

- 1 In the Web GUI, click Administration > Configuration > Modules.
- **2** Check the appropriate box to enable the following features:

Enable Application Control	Allow, monitor, or block the programs that access the Internet. Configure application control policies on the Edit Policy page. This feature is included in the Symantec Web Gateway license.
	See "Configuring policies for Internet applications" on page 109.
Enable Content Filter	If you have the URL filtering license, you can enable URL filtering. Configure URL filtering policies on the Edit Policy page.
	See "Configuring URL filtering policies for Web sites" on page 116.

Bypass Whitelist for Content Filter	If you check Bypass Whitelist for Content Filter , you disable the internal whitelist and your custom whitelist. The Web pages in those whitelists that Symantec Web Gateway normally ignores are subject to monitoring and blocking. This feature requires the URL filtering license.
	The internal whitelist contains the domain names for definition updates and software updates of antivirus vendors and software vendors. Due to security concerns, Symantec cannot publish the contents of the internal whitelist.
	Symantec recommends that you not bypass the whitelist for content filter.
Record browse time	Symantec Web Gateway records the approximate amount of time that each user views Web sites. This feature requires the URL filtering license.
	The following settings are available for this module:
	 Threshold Web browsing activity under this value is not recorded. The default is 5 minutes. Sensitivity If Symantec Web Gateway detects no Web
	browsing activity after this time has elapsed, it stops tabulating the browse time. Symantec Web Gateway ignores or records the browse time depending on the Threshold value. The default is 3 minutes.
	See "Monitoring user browse time" on page 169.
Insight	Symantec Web Gateway can block, monitor, ignore, or allow access to files and other sources of malware based on reputation-based security. Insight is a Symantec technology that can flag probable malware not previously known to Symantec.
	See "Enabling Insight reputation-based security" on page 102.

3 Click Save.

Creating static routes for the inline network configuration

You must use static routes if you plan to connect Symantec Web Gateway in the inline network configuration. You must configure a static route to each internal subnet beyond the main switch. Whenever you add an additional subnet, you must add a static route to Symantec Web Gateway. If you do not add a static route when you add a subnet, users on that subnet may see the following error message: "Page not found."

Note: You do not have to configure static routes in the Web GUI if you deploy Symantec Web Gateway in the port span/tap network configuration. Symantec Web Gateway only requires static routes for the inline network configurations.

A static route is a path to an internal subnet through an intermediate switch. In the inline network configuration, you connect the LAN port on Symantec Web Gateway to a main switch. If that switch connects to another subnet, you must configure a static route for each subnet beyond the switch that is connected to Symantec Web Gateway.

To create static routes for the inline network configuration

- 1 In the Web GUI, click **Administration > Configuration > Network**.
- 2 Click Add a Static Route.
- 3 In **Destination**, type the IP address of the subnet.

For example, if computers on the network have IP addresses in the range 10.10.20.0 to 10.10.20.255, type 10.10.20.0.

4 In **Netmask**, type the netmask for the subnet.

For example, if you specified a destination of 10.10.20.0, type 255.255.255.0.

5 In **Gateway**, type the IP address of the router or switch.

The gateway is the IP address of the router, such as 10.10.20.100.

- **6** Add additional static routes for each internal subnet.
- 7 Click Save.

Specifying a mail server for alerts and reports

You can provide settings for an alternate mail server in case your default mail server fails to send reports and alerts to administrators.

To specify a mail server for alerts and reports

- 1 In the Web GUI, click **Administration > Configuration > Email**.
- **2** Specify your own mail server IP address, port, and email address from which email should appear to be from.

The mail server that you specify must support the SMTP email protocol.

3 Uncheck **Requires Authorization** if the server does not require authentication.

This server does not require authentication.

4 Click Save.

Specifying internal email and external proxy servers for report accuracy

Because of their special roles, you must specify internal email and external proxy servers to ensure that report results are accurate.

To specify internal email and external proxy servers for report accuracy

- 1 In the Web GUI, click **Administration > Configuration > Servers**.
- 2 Click Add a server.
- **3** Specify the server parameters.
- 4 Click Save.

Testing Symantec Web Gateway for successful blocking or monitoring

Symantec has a Web site that you can use to test that Symantec Web Gateway blocks or monitors network data.

To test Symantec Web Gateway for successful blocking or monitoring

- 1 Start a Web browser on a computer in the LAN that is connected to Symantec Web Gateway.
- **2** On the Internet, go to the following URL:

www.symantec.com

The Symantec Web site should display normally without any block messages.

3 On the Internet, go to the following URL:

testwebgateway.com/test/bltest.htm

Blocking mode or monitoring mode should be indicated as follows:

Blocking mode	If you configure Symantec Web Gateway in blocking mode, a block page appears in your Web browser. If the block page does not appear, Symantec Web Gateway is not correctly configured to block access to spyware.
Monitoring mode	If you configure Symantec Web Gateway in monitoring mode, the test page appears in your Web browser. To check for successful monitoring, find the computer in the Web GUI reports. The report should show that the computer accessed a malware page.
	If the Web GUI does not indicate that the computer accessed a malware page, Symantec Web Gateway is not correctly configured to monitor access to spyware.

See "About the Symantec Web Gateway operating modes" on page 26.

Testing Symantec Web Gateway Threat Center connectivity

You can check the connection from Symantec Web Gateway to the Threat Center in the Web GUI. If Symantec Web Gateway can connect to the Threat Center, then it can also download database updates and software updates.

See "About database and software updates" on page 148.

To test Symantec Web Gateway Threat Center in the Web GUI

- 1 In the Symantec Web Gateway Web GUI, click Administration > Configuration > Network.
- **2** Beside **Test Connection to Symantec Threat Center**, click **Test**. The following message appears when the test connection is successful:

Connection to Symantec Threat Center from Appliance Serial No. (Appliance ID) is successful.

Running the setup wizard after initial installation

You might want to run the setup wizard again to address the following issues:

- You forgot the password for the primary system user and do not have access to the email address that you specified in the setup wizard. However, if you do have access to the email address that you specified, you can have the password emailed to the account. See "Resetting the Web GUI password for the primary system user" on page 160.
- You forgot the logon name for the primary system user.

If you have access to another system user account with Administration permission, you can resolve these issues. Log on to the Web GUI and change the logon name or password for the primary system user.

To run the setup wizard again, you must first access Symantec Web Gateway through the Serial Console. Symantec Web Gateway retains your initial configuration choices when you run the setup wizard again.

To run the setup wizard after initial installation

1 Connect a computer to the Serial Console on Symantec Web Gateway.

See "Serial Console access to Symantec Web Gateway" on page 160.

- **2** Log on to the Serial Console.
- 3 In the Serial Console, select the option to unlock the setup wizard.
- 4 Exit from the Serial Console.
- **5** On a computer that is connected to Symantec Web Gateway, open a Web browser and go to the URL that you typically use to access Symantec Web Gateway.

The setup wizard should appear. Complete the setup wizard.

See "Running the setup wizard" on page 46.

64 | Installing Symantec Web Gateway Running the setup wizard after initial installation

Chapter

Installing Symantec Web Gateway Virtual Edition

This chapter includes the following topics:

- About Symantec Web Gateway Virtual Edition
- Installing Symantec Web Gateway Virtual Edition
- System requirements for Symantec Web Gateway Virtual Edition
- About adding the VMware LAN Network virtual switches
- About configuring the VMware virtual switch

About Symantec Web Gateway Virtual Edition

Symantec Web Gateway Virtual Edition runs as a virtual machine on VMware so that you can run Symantec Web Gateway on the hardware and operating system of your choice.

Table 4-1 describes some considerations about Symantec Web GatewayVirtualEdition.

Consideration	Details
All network configurations are supported.	You can install Symantec Web Gateway Virtual Edition in any of the following network configurations:
	 Inline This configuration is supported but not recommended. Proxy Inline + proxy Port span/tap Central Intelligence Unit
	on page 24.
	See "About centralized management using a Central Intelligence Unit" on page 195.
The bypass mode is unsupported.	Symantec Web Gateway Virtual Edition does not have a bypass mode like the Symantec Web Gateway appliances. For Symantec Web Gateway Virtual Edition, in an inline network configuration, network traffic is halted when the service is disabled or the physical host computer is turned off.
	See "About Symantec Web Gateway network configurations" on page 24.
	See "About ensuring Internet connectivity if Symantec Web Gateway is disabled" on page 54.
Connecting management computers to the Management network.	You must connect the computers that you want to access the Web GUI to the Ethernet port that is assigned to the Management network.
The VMware snapshot is unsupported.	Symantec does not support restoring from a VMware snapshot. Use the instructions in this guide to install Symantec Web Gateway Virtual Edition.

Table 4-1Symantec Web Gateway Virtual Edition usage notes

See "Installing Symantec Web Gateway Virtual Edition" on page 66.

Installing Symantec Web Gateway Virtual Edition

 Table 4-2 describes the steps to install Symantec Web Gateway Virtual Edition.

Step	Action	Description
Step 1	Review system requirements.	Ensure that you have a supported version of VMware and that the virtual machine is provisioned appropriately.
		See "System requirements for Symantec Web Gateway Virtual Edition" on page 70.
Step 2	Download the Virtual image files.	If you purchase a license for Symantec Web Gateway, you can download the Virtual image files from the Symantec File Connect site.
		To access Symantec File connect, on the Internet, go to the following URL:
		https://fileconnect.symantec.com/
		If you have not yet purchased a license, you can download the Virtual image files from our product Trialware site.
		To access the Symantec Web Gateway Trialware site, on the Internet, go to the following URL:
		http://www.symantec.com/business/products/ trialware.jsp?pcid=pcat_security&pvid=web_gateway_1
		Ensure that you put all of the virtual image files in the same directory.
Step 3	Prepare your host.	Do the following tasks to prepare your virtual machine:
		 Add the VMware LAN network virtual switches and configure their port properties. Each Symantec Web Gateway port that you use (management, WAN, LAN, and monitor) requires one unique virtual switch. See "About adding the VMware LAN Network virtual switches" on page 71. Configure the default VMware virtual switch. See "About configuring the VMware virtual switch" on page 73.

 Table 4-2
 Steps to install Symantec Web Gateway Virtual Edition

Step	Action	Description
Step 4	Deploy the OVF template.	Deploy the OVF template that you downloaded in Step 2 on a VMware ESX/ESXi Server. If you use ESX version 4.1, when you download the template, you may be asked to choose thin disk provisioning or thick disk provisioning. Symantec Web Gateway recommends that you use thick disk provisioning.
		An OVF template is a virtual machine that includes the software that you plan to run on the computer. You can deploy the OVF template with a vSphere client on a different computer than the computer that hosts your ESX/ESXi Server.
		Symantec Web Gateway only supports the deployment of an unaltered OVF template file. Symantec Web Gateway does not support the creation of an OVF template from the Symantec Web Gateway template.
		The OVF deployment takes about 10 minutes. When it completes, the new computer appears in your inventory. You may want to configure your guest computer to restart when the host computer restarts.
Step 5	Reserve memory for the Symantec Web Gateway	You can set the memory reservation in vSphere in the Resources > Memory > Reservation settings.
	virtual appliance.	See "System requirements for Symantec Web Gateway Virtual Edition" on page 70.

Table 4-2	Steps to install Symantec Web Gateway Virtual Edition (continued
Table 4-2	Steps to install Symantee web Galeway virtual Edition (continued

Step	Action	Description		
Step 6	Configure virtual network adapters.	To configure the virtual network adapters, do all of the following tasks:		
		 In the vSphere client, edit the following setting: Symantec_Web_Gateway_VMimage_5.0.0.xxx_Linux_EN where x.xx is the Symantec Web Gateway version release number. Configure the network adapters with the following names and network connections: Adapter 1 Management - Management network Adapter 2 WAN - WAN network Adapter 3 LAN - LAN network Adapter 4 Monitor - Span/tap network Note: Depending on your deployment, not all of these settings 		
		may apply. See "Port connections for typical network configurations"		
		on page 27.		
		After you configure your virtual network adapters, verify in vSphere that they are properly configured.		
Step 7	Physically connect the network adapters as you would for a non-virtual deployment.	Physically connect the actual network adapters to the ESX/ESXi host computer.		
		See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.		
		See "Port connections for typical network configurations" on page 27.		
		See "Diagrams of typical network configurations" on page 28.		
Step 8	Start the virtual computer.	In the vSphere client, turn on the following:		
		Symantec_Web_Gateway_VMimage_5.0.0.xxx_Linux_EN		
		where <i>x.xx</i> is the Symantec Web Gateway version release number.		
		You must connect the computer that you to access the Web GUI to the Ethernet port that is assigned to the Management network.		
Step 9	Run the setup wizard.	Run the Symantec Web Gateway setup wizard as you would for a non-virtual installation.		
		See "Running the setup wizard" on page 46.		

 Table 4-2
 Steps to install Symantec Web Gateway Virtual Edition (continued)

For more information about how to perform the tasks or navigate to the settings that are described in Table 4-2, consult your vSphere documentation.

System requirements for Symantec Web Gateway Virtual Edition

Table 4-3 lists the system requirements for Symantec Web Gateway Virtual Edition.

Requirement	Minimum for production environment
Disk space	90 GB (thick provisioned format)
Memory	The memory requirement is based on your network configuration mode, as follows:
	■ Port span/tap mode: 4 GB
	■ Inline mode: 4 GB
	■ Proxy mode: 8 GB
	■ Inline + proxy mode: 8 GB
	■ CIU mode: 4 GB
CPUs	2

 Table 4-3
 System requirements for Symantec Web Gateway Virtual Edition

Table 4-4 lists the system requires for the host.

Table 4-4System requirements for the ESX/ESXi host

Requirement	Minimum for production environment
VMware ESX Server or VMware ESXi Server	Version 4.0 or 4.1
CPU type	64-bit
CPUs (includes Hyper-Threading)	2
CPU speed	1.8 GHz
Hardware virtualization	Enabled
Disk space	120 GB

Requirement	Minimum for production environment
Memory	 The memory requirement is based on your network configuration mode, as follows: Port span/tap mode: 4 GB Inline mode: 4 GB Proxy mode: 8 GB Inline + proxy mode: 8 GB CIU mode: 4 GB
Physical NICs	 The NIC requirement is based on your network configuration mode, as follows: Port span/tab mode: 2 Inline mode: 3 Proxy mode: 2 Inline + proxy mode: 3 CIU mode: 1

 Table 4-4
 System requirements for the ESX/ESXi host (continued)

Refer to your VMware documentation for VMware system requirements.

About adding the VMware LAN Network virtual switches

You must create VMware LAN Network virtual switches for each Symantec Web Gateway network port that you intend to use based on your deployment option. After you create the switch, you can configure the certain properties. Create the LAN Network virtual switch on your ESX/ESXi system to connect to your network based on the Symantec Web Gateway network configuration guidelines.

See "Port connections for typical network configurations" on page 27.

If you want to build the LAN Network virtual switch to map to the Symantec Web Gateway interface, create a virtual switch and select the appropriate ESX/ESXi interface for your device.



Figure 4-1Suggested Network virtual switch configuration

Table 4-5 describes the values that you should use in vSphere when you create a LAN Network virtual switch.

Table 4-5	VMware I AN	Network virtual	switch	property	values
		Network virtual	SWILLII	property	values

Property	Value
Connection Type	Virtual Machine
VLAN ID	Leave as is
Promiscuous Mode	Accept
Failback	No
Notify Switches	No

For any property that Table 4-5, does not specify, use any value.

For more information about how to add a VMware LAN Network virtual switch and configure port property settings, refer to your vSphere documentation.
After you configure the VMware LAN virtual switch, map the virtual switches to your network the same as you would for a non-virtual installation.

See "Port connections for typical network configurations" on page 27.

About configuring the VMware virtual switch

ESX/ESXi installations automatically create a default virtual switch, which is called the VM Network. You must configure the VM Network virtual switch network properties for Symantec Web Gateway Virtual Edition to function properly.

Table 4-6 describes how you should configure the VM Network port properties invSphere.

Property	Value
Connection Type	Virtual Machine
VLAN ID	Leave as is
Promiscuous Mode	Accept
Failback	No
Notify Switches	No

 Table 4-6
 VM Network virtual switch property values

For any property that Table 4-6 does not specify, use the default value.

For more information about how to configure port properties, refer to your vSphere documentation.

After you configure the VMware virtual switch, map the virtual switches to your network the same as you would for a non-virtual installation.

See "Port connections for typical network configurations" on page 27.

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Chapter

Configuring the Symantec Web Gateway proxy

This chapter includes the following topics:

- About the Symantec Web Gateway proxy
- Available features when the Symantec Web Gateway proxy is enabled
- Required Web browser settings for the Symantec Web Gateway proxy
- Configuring the Symantec Web Gateway HTTP proxy and HTTPS proxy
- How SSL Deep Inspection differs from SSL Domain Level Inspection
- Configuring the Symantec Web Gateway proxy for SSL Deep Inspection
- Configuring the Symantec Web Gateway proxy for SSL Domain Level Inspection
- Specifying a Symantec Data Loss Prevention server
- Configuring the Symantec Web Gateway SOCKS proxy
- Configuring the Symantec Web Gateway FTP proxy

About the Symantec Web Gateway proxy

Symantec Web Gateway has an integrated proxy. The Symantec Web Gateway proxy can perform as a traditional FTP, HTTP, and SOCKS proxy. The Symantec Web Gateway proxy can also decrypt SSL-encrypted network traffic for URL content filtering, blacklisted-domain matching, and malware. The Symantec Web Gateway proxy lets you route network traffic through a Symantec Data Loss Prevention server. SSL-encrypted network traffic can also be routed to and inspected by Symantec Data Loss Prevention. You must enable the Symantec Web Gateway proxy to use some features.

See "Available features when the Symantec Web Gateway proxy is enabled" on page 76.

Configure your firewall to allow the traffic to and from the Symantec Web Gateway proxy ports. Web browsers at your site must be configured to work with the Symantec Web Gateway proxy.

See "Required Web browser settings for the Symantec Web Gateway proxy" on page 78.

Symantec Web Gateway is designed to load balance your proxy traffic across multiple HTTP/S proxy ports within one proxy server. However, if you do not intend to use all four default ports, you can improve performance if you change the port configuration to only the port(s) that you use.

See "Sample proxy auto-configuration (PAC) file" on page 193.

Symantec Web Gateway can also integrate with a separate software or hardware proxy on your network.

Available features when the Symantec Web Gateway proxy is enabled

Symantec Web Gateway can perform some tasks without the Symantec Web Gateway proxy. You can block and monitor Web sites, detect malware, and use whitelists and blacklists.

Table 5-1 describes some features that require you to enable the proxy.

Feature	Description
HTTP, HTTPS, SOCKS, or FTP proxy	To use the Symantec Web Gateway proxy as a proxy for HTTP, HTTPS, SOCKS, or FTP, you must enable it.
	See "Configuring the Symantec Web Gateway HTTP proxy and HTTPS proxy" on page 79.
	See "Configuring the Symantec Web Gateway SOCKS proxy" on page 87.
	See "Configuring the Symantec Web Gateway FTP proxy" on page 87.

 Table 5-1
 Features for which the Symantec Web Gateway proxy is required

(continued)	
Feature	Description
SSL Deep Inspection	You must enable SSL Deep Inspection to monitor the network traffic that is encrypted with SSL.
	See "Configuring the Symantec Web Gateway proxy for SSL Deep Inspection" on page 83.
	See "How SSL Deep Inspection differs from SSL Domain Level Inspection" on page 80.
SSL Domain Level Inspection	Use the proxy to monitor and block the Web sites that are encrypted with SSL by domain (for example, https://foo.com) or IP address (for example, https://192.168.1.10). But it cannot report or inspect full URLs. Nor can it report or inspect file transfers, malware, or any data in the stream, such as the keywords it forwards to Symantec Web Prevent.
	See "Configuring the Symantec Web Gateway proxy for SSL Domain Level Inspection" on page 85.
	See "How SSL Deep Inspection differs from SSL Domain Level Inspection" on page 80.
Integration with Symantec Data Loss Prevention	Symantec Web Gateway integrates with Symantec Data Loss Prevention Network Prevent for Web to monitor outgoing Web traffic. Symantec Data Loss Prevention Network Prevent is a component of Symantec Data Loss Prevention. This Symantec product discovers, monitors, and protects confidential data wherever it is stored or used. With Symantec Data Loss Prevention, you can create the policies that extend across endpoint, network, and storage systems.
	Prevention server" on page 85.

Table 5-1Features for which the Symantec Web Gateway proxy is required
(continued)

Table 5-1	Features for which the Symantec Web Gateway proxy is required
	(continued)

Feature	Description
Proxy authentication using 407 NTLM authentication	Some forms of NTLM authentication require the proxy. 407 NTLM authentication is only available when you enable the Symantec Web Gateway HTTP/HTTPS proxy. SSL and SOCKS do not support 407 NTLM. See "Web browser changes needed for NTLM" on page 187.

Required Web browser settings for the Symantec Web Gateway proxy

The Web browsers at your site must be configured to work with the Symantec Web Gateway proxy.

Table 5-2 provides an overview of the Web browser settings that are required.

Component	Configuration requirement
Proxy settings in Web browsers	You must configure Web browsers to access the Internet through the Symantec Web Gateway proxy. You can configure each Web browser separately or use automation.
	 WPAD and PAC In this method, Web browsers automatically detect the required proxy settings from a central PAC file. See "Sample proxy auto-configuration (PAC) file" on page 193. Group policy in Active Directory If you use Active Directory, you can propagate proxy settings to Web browsers with group policies.

Table 5-2Web browser settings for the Symantec Web Gateway proxy

(continued)	
Component	Configuration requirement
Certificate store in Web browsers (for SSL Deep Inspection only)	 You must import either the Symantec Web Gateway certificate or your own certificate into every Web browser on your network. You can manually import the certificate into each Web browser separately to use automation. Automation methods include the following: Group policy in Active Directory If you have Active Directory configured at your site, you can import the certificate into Web browsers using group policies. Domain login script In Microsoft Windows environments, you can configure a login script to run after users log on.

Table 5-2Web browser settings for the Symantec Web Gateway proxy
(continued)

Configuring the Symantec Web Gateway HTTP proxy and HTTPS proxy

Symantec Web Gateway has a proxy that you can enable for HTTP and HTTPS network traffic. The HTTP/HTTPS proxy supports HTTP version 1.0 and version 1.1.

For the HTTP cache, Symantec Web Gateway honors the cache-related code in downloaded HTTP files.

To configure the Symantec Web Gateway HTTP proxy and the HTTPS proxy

- 1 In the Web GUI, click **Administration > Configuration > Proxy**.
- 2 Under HTTP Settings, check Enable HTTP/S Proxy.
- **3** For HTTP/S Proxy Port(s), type one or more ports.

The proxy listens for HTTP traffic from user Web browsers at the ports that you specify. You can type individual ports or a range of ports. Separate a range of ports with a dash. Use commas to separate ports. You can configure a maximum of 16 ports.

The default ports are 8080 through 8083.

4 Type a number for the **Maximum Cache Object Size**.

Files over the number of megabytes that you specify are not retained in the cache on Symantec Web Gateway. The maximum size is 1024 MB.

The default is 4 MB.

5 Type a number for the **Keep Alive Timeout**.

The **Keep Alive Timeout** is how long the proxy keeps a network connection open after the last transmission. The maximum is 1800 seconds (30 minutes).

The default is 120 seconds.

6 Check or uncheck Byte Range Support.

The byte range support determines whether partial requests for data are served from the cache or fetched from the Internet.

Byte Range Support checked	HTTP and HTTPS requests under 14 KB are served from the cache. If the requested files are not already cached, the data is fetched, cached, and passed along. Requests that are over 14 KB in size bypass the cache and are served from the Internet.
Byte Range Support unchecked	Partial responses are fetched and passed along but not cached.

The default is checked. The 14 KB byte range cannot be changed.

7 If you want, click **Add a Cache Exception** to add a domain that you do not want cached.

Data is not cached for the domains that are listed under **Cache Exception Domain**. You may want to exclude the Web sites that mainly stream content. In some cases, you may want to exclude internal Web servers.

The maximum number of cache domain exceptions is 30.

8 Click Save.

How SSL Deep Inspection differs from SSL Domain Level Inspection

Table 5-3 describes how SSL Domain Level Inspection differs from SSL DeepInspection.

SSL Domain Level Inspection	SSL Deep Inspection
 Symantec Web Gateway reports the access of and blocks Web sites by domain (for example, https://foo.com) or IP address. But it cannot report or inspect full URLs. Nor can it report or inspect file transfers, malware, or any data in the stream such as the content it forwards to Symantec Web Prevent (Symantec DLP server). SSL Domain Level Inspection occurs when you do either of the following: Send HTTPS traffic to the Symantec Web Gateway HTTP/S proxy. Send HTTPS traffic to the SSL Deep Inspection Provy and have no policy that 	Symantec Web Gateway reports the access of and blocks Web sites by domain, and it can inspect all of the traffic in the traffic stream. This inspection includes full URLs and file inspections. It also includes the content that it forwards to Symantec Web Prevent. Only the SSL Deep Inspection proxy can intercept HTTPS traffic and decrypt the traffic to read the contents. Symantec Web Gateway disables the ability to intercept HTTPS traffic by default. But you can enable it through the use of policies.
intercepts the HTTPS traffic.	proxy for SSL Deep Inspection" on page 83.
Note: The custom blacklist is not supported over HTTPS.	See "Configuring policies for SSL Deep Inspection" on page 105.
See "Configuring the Symantec Web Gateway proxy for SSL Domain Level Inspection" on page 85.	

Table 5-3Differences between SSL Domain Level Inspection and SSL Deep
Inspection

You can enable the HTTP/S proxy and the SSL Deep Inspection proxy at the same time. Based on your configuration, you can route HTTPS traffic from the network to either or both proxies. You can configure each individual computer on the corporate network to send HTTPS traffic to Symantec Web Gateway HTTP/S proxy or to the SSL Deep Inspection proxy. You can configure some computers to send traffic through one proxy while other computers send traffic to the other.

The following is a simple use case scenario:

IT administrator sets up the Symantec Web Gateway proxy to protect Group A and Group B. Group B requires a higher level of security. So the administrator wants to ensure that Symantec Web Gateway decrypts and inspects all of the contents of this traffic. But the administrator does not want to decrypt or inspect Group A's or Group B's financial transactions for privacy purposes and legal purposes. So the administrator creates an SSL policy that intercepts all HTTPS traffic except for the traffic that goes to financial institutions.

The administrator creates corporate policies with a PAC file or other configuration settings to ensure that:

- Group A and Group B HTTP traffic goes to the Symantec Web Gateway HTTP/S proxy.
- Group A HTTPS traffic goes to the Symantec Web Gateway HTTP/S proxy. In this scenario, SSL Domain Level Inspection occurs.
- Group B HTTPS traffic goes to the SSL Deep Inspection proxy.
 Per the policy, SSL Deep Inspection occurs except for the HTTPS traffic to financial institutions.

Table 5-4 describes what occurs when users in each group attempt to access certainWeb sites.

Scenario	Result
A user from Group A or Group B goes to http://blacklisted_domain.com	 Symantec Web Gateway blocks this traffic. Symantec Web Gateway reports that this user was blocked from going to http://blacklisted_domain.com.
A user from Group A or Group B goes to https://blacklisted_domain.com	 Symantec Web Gateway blocks this traffic. Symantec Web Gateway reports that this user was blocked from going to https://blacklisted_domain.com.
A user from Group A or Group B tries to download a virus from http://site_with_virus.com/virus_file.exe/	 Symantec Web Gateway inspects the file and blocks the virus download. Symantec Web Gateway reports that the virus was blocked from being downloaded from http://site_with_virus.com/virus_file.exe/.
A user from Group A tries to download a virus from https://site_with_virus.com/virus _file.exe/	 Symantec Web Gateway does not block the virus. Symantec Web Gateway reports that the user went to https://site_with_virus.com/ .
A user from Group B tries to download a virus from https://site_with_virus.com/virus_file.exe/	 Symantec Web Gateway inspects the file and blocks the virus download. Symantec Web Gateway reports that the virus was blocked from being downloaded from https://site_with_virus.com/virus_file.exe/.

Table 5-4Use case scenarios

Scenario	Result
A user from Group A tries to download a financial statement text file from https://my_bank.com/monthly_statement.txt	 Symantec Web Gateway reports that the user went to https://my_bank.com/. Symantec Web Gateway does not inspect the file.
A user from Group B tries to download a financial statement text file from https://my_bank.com/monthly_statement.txt	 Symantec Web Gateway reports that the user went to https://my_bank.com. Symantec Web Gateway does not inspect the file.

Table 5-4Use case scenarios (continued)

Configuring the Symantec Web Gateway proxy for SSL Deep Inspection

Symantec Web Gateway has a proxy that you can enable to inspect the contents of SSL-encrypted network traffic. Symantec Web Gateway can check SSL-encrypted network traffic for URL content filtering, blacklisted-domain matching, and malware. Symantec Web Gateway can also route SSL-encrypted network traffic to Symantec Data Loss Prevention for inspection.

See "How SSL Deep Inspection differs from SSL Domain Level Inspection" on page 80.

SSL Deep Inspection for computers in your network is not automatically enabled after you configure the proxy. To use SSL Deep Inspection, you must create one or more policies that employ SSL Deep Inspection.

Note: SSL Deep Inspection does not support custom blacklists.

See "Configuring policies for SSL Deep Inspection" on page 105.

To configure the proxy for SSL deep inspection

- **1** In the Web GUI, click **Administration > Configuration > Proxy**.
- 2 Under SSL Deep Inspection Settings, check Enable SSL Deep Inspection.
- **3** For **SSL Port**, type a port.

The Symantec Web Gateway proxy listens for SSL traffic at the port that you specify. If you have enabled the internal HTTP/S proxy, the SSL port must be different than the HTTP/S ports and cannot be 8080-8083. The default port is 8443.

4 Type a number for **Maximum SSL Connections**.

If the number of SSL connections that Symantec Web Gateway monitors exceeds this number, new connections are blocked until existing connections are closed.

The default is 10240 connections.

5 Select a certificate type beside **SSL Certificate**.

Use Default Certificate	Use the default certificate that is included in Symantec Web Gateway.
Use Imported Certificate	Use your own certificate. You must specify the certificate and key. The certificate and key must be in DER format or PEM format containing US-ASCII or UTF characters only.
	The way that you import SSL certificates in Internet Explorer 9 differs from Internet Explorer 8/7.
	For Internet Explorer 9, select the option to Place all certificates in the following store to import the certificate into Trusted Root Certification Authorities.
	For Internet Explorer 8/7, select the option Automatically select the certificate store based on the type of certificate to import the certificate to the intermediate Certification Authorities.
	For more information, see your Internet Explorer documentation.

6 Click **Export SSL Certificate** and save the default certificate.

You must import this exported certificate into user Web browsers if you choose the option **Use Default Certificate**.

See "Required Web browser settings for the Symantec Web Gateway proxy" on page 78.

7 Click Save.

Configuring the Symantec Web Gateway proxy for SSL Domain Level Inspection

Symantec Web Gateway reports and blocks Web sites by domain (for example, https://foo.com) or IP address (for example, https://192.168.1.10). But it cannot report or inspect full URLs. Nor can it report or inspect file transfers, malware, or any data in the stream, such as the content it forwards to Symantec Web Prevent.

See "How SSL Deep Inspection differs from SSL Domain Level Inspection" on page 80.

To configure the Symantec Web Gateway proxy for SSL Domain Level Inspection

- Do either of the following tasks:
 - Send HTTPS traffic to the Symantec Web Gateway HTTP/S proxy.
 See "Configuring the Symantec Web Gateway HTTP proxy and HTTPS proxy" on page 79.
 - Send HTTPS traffic to the SSL Deep Inspection Proxy and have no policy that intercepts the HTTPS traffic.
 See "Configuring the Symantec Web Gateway proxy for SSL Deep Inspection" on page 83.

See "Configuring policies for SSL Deep Inspection" on page 105.

Specifying a Symantec Data Loss Prevention server

If you use the Symantec Web Gateway proxy, you can route outbound HTTP traffic and HTTPS traffic through a Symantec Data Loss Prevention (DLP) server. The Symantec DLP server discovers, monitors, and protects confidential data. The Symantec DLP server must run Network Prevent for Web version 11.0 or later.

The connection to Symantec DLP is fail open. If there is a communication problem between Symantec Web Gateway and Symantec DLP, network traffic bypasses Symantec DLP without inspection.

Note: When you configure the Symantec DLP server, carefully consider the value that you specify on the **Configure Server** page under **Request Filtering** for the option **Ignore Requests Smaller Than**. If you set the value too high, Symantec Web Gateway may ignore potentially important files. Symantec Web Gateway still sends the request, but the DLP server does not inspect it.

For more information, see your Symantec Data Loss Prevention server documentation.

You must check **Enable HTTP/S Proxy** or **SSL Deep Inspection** for the **Enable DLP** option to appear.

See "Configuring the Symantec Web Gateway proxy for SSL Deep Inspection" on page 83.

See "Configuring the Symantec Web Gateway proxy for SSL Domain Level Inspection" on page 85.

To specify a Symantec Data Loss Prevention server

1 Configure the HTTP settings of the Symantec Web Gateway proxy.

See "Configuring the Symantec Web Gateway HTTP proxy and HTTPS proxy" on page 79.

- 2 In the Web GUI, on the Administration > Configuration > Proxy tab, under Symantec DLP Network Prevent Settings, click Enable DLP.
- **3** In the **DLP Session Timeout** box, type the number of seconds that the Symantec DLP server session remains idle. After this timeout period, Symantec Web Gateway disconnects the session. Symantec Web Gateway re-establishes the connection when another request is made.

You may need a shorter timeout if Internet traffic at your site is high. You may need a longer timeout if Internet traffic at your site is low. Please test changes before you deploy them in a production environment.

- 4 Click Add a DLP Server to add a Symantec DLP server.
- 5 In the **DLP Server IP Address** box, type the address of the Symantec DLP server.
- 6 In the **DLP Port** box, type the port number of the Symantec DLP server.

The Symantec DLP server communicates with the Symantec Web Gateway proxy over the ICAP protocol. The default value of ICAP protocol port is 1344, but you can change this value.

7 Repeat 4 through 6 to add additional Symantec DLP servers.

The maximum number of Symantec DLP servers that you can use is as follows:

If you enable SSL Deep16Inspection16If you enable Domain Deep4Inspection16

8 Click Save.

Configuring the Symantec Web Gateway SOCKS proxy

Symantec Web Gateway has a proxy that you can enable as a SOCKS proxy for TCP and UDP network traffic such as HTTP and FTP. Symantec Web Gateway supports SOCKS version 5.

To configure the Symantec Web Gateway SOCKS proxy

- 1 In the Web GUI, click Administration > Configuration > Proxy.
- 2 Under SOCKS Settings, check Enable SOCKS Proxy.
- **3** For **SOCKS Port**, type the port number.

The Symantec Web Gateway proxy listens for network traffic at the port that you specify.

The default port is 1080.

4 Type a number for the **SOCKS Session Timeout**.

The **SOCKS Session Timeout** is how long the Symantec Web Gateway proxy keeps a network connection open after the last transmission. You may need a shorter timeout if Internet traffic at your site is high. You may need a longer timeout if Internet traffic at your site is low. Test changes before you deploy them in a production environment.

The default is 120 seconds.

5 Click Save.

Configuring the Symantec Web Gateway FTP proxy

Symantec Web Gateway has a proxy that you can enable for FTP network traffic.

To configure the Symantec Web Gateway FTP proxy

- 1 In the Web GUI, click **Administration > Configuration > Proxy**.
- 2 Under FTP Settings, check Enable FTP Proxy.
- **3** For **FTP Proxy Port**, type a port.

The proxy listens for FTP traffic at the port that you specify.

The default port is 8021.

4 Check or uncheck Allow PASV Mode to FTP Server.

In PASV mode, the FTP server negotiates a communication session using an alternate port after it establishes a session on the default port.

The default is checked.

5 Type a number for the **FTP Session Timeout**.

The **FTP Session Timeout** is how long the proxy keeps an FTP network connection open after the last transmission. You may need a shorter timeout if Internet traffic at your site is high. You may need a longer timeout if Internet traffic at your site is low. Please test changes before deploying them in a production environment.

The default is 300 seconds.

6 Click Save.

Chapter

Configuring policies

This chapter includes the following topics:

- About policies
- Configuring the policy precedence order
- Download behavior in user Web browsers
- Internet applications, malware, and URL filtering blocking behavior
- Specifying computers or users for policies
- About Insight reputation-based security
- Configuring policies for SSL Deep Inspection
- Configuring policies for malware
- Configuring policies for Internet applications
- Malware categories for policies
- Configuring URL filtering policies for Web sites
- Allowing after hours access to Web sites
- Quarantining infected computers
- Configuring NTLM user authentication behavior
- Blocking or monitoring Web sites using the blacklist
- Blocking or monitoring file transfers using the blacklist
- Allowing Web site access using the whitelist
- About the blocking feedback report



About policies

You can create policies to control the content that flows in and out of your Web gateway. If you configure Active Directory integration, you can also create policies by user names, workgroups, organizational units, or departments.

If you plan to block Web sites by category, you should initially configure a policy to monitor that category of Web sites. After a period of time, check the reports to see what Web sites have been monitored. That way you can be sure that your policy matches only the types of Web sites that were expected. Also, you should test that the desired action occurs by accessing the Symantec Web Gateway test page from a computer in each policy workgroup.

See "Testing Symantec Web Gateway for successful blocking or monitoring" on page 61.

Note: You must install Symantec Web Gateway in the inline, proxy, or inline plus proxy network configuration to block file transfers. If you configure Symantec Web Gateway in the port span/tap network configuration, the block action is not available in the Web GUI.

See "About Symantec Web Gateway network configurations" on page 24.

Table 6-1 describes the types of actions that you can configure a policy.

Action	Description
Decrypt SSL-encrypted network traffic.	Check SSL-encrypted network traffic for malware detection and URL filtering. SSL-encrypted network traffic can also be routed to and inspected by Symantec Data Loss Prevention. See "Configuring policies for SSL Deep Inspection"

Table 6-1Policy actions

Action	Description
Enforce user authentication.	Require authentication before users access Web sites.
	You must configure Active Directory integration with NTLM for this policy to function. The authentication is typically invisible to users. In some cases users may see an authentication request in their Web browsers. You can only configure authentication policies for IP addresses, subnets, and services because Active Directory information is not available before authentication.
	See "Configuring NTLM user authentication behavior" on page 130.
Quarantine infected computers.	Prevent malware-infected computers from accessing the Internet.
	See "Quarantining infected computers" on page 129.
Block, monitor, or ignore malware by category, severity, or detection type.	Block, monitor, or ignore certain categories of malware. Generally you should block all malware for all users. If necessary, you can configure exceptions for certain categories of malware for certain computers.
	See "Configuring policies for malware" on page 106.
Allow, block, monitor, or ignore downloads based on Insight reputation-based security.	Allow, block, monitor, or ignore downloads using Insight, a Symantec technology that can flag probable malware not previously known to Symantec.
	See "Configuring policies for Insight reputation-based security" on page 104.
Block or allow select Internet applications and spyware.	Block, monitor, or allow access to individual Internet applications or categories of Internet applications.
	See "Configuring policies for Internet applications" on page 109.

Table 6-1Policy actions (continued)

Action	Description
Allow after hours access.	Allow users to access categories of Web sites outside of normal working hours.
	For example, you can block access to entertainment Web sites during working hours but allow access after working hours. You specify the times for after hours access and also non-working days. To allow after hours access, you must have the URL filtering license.
	See "Allowing after hours access to Web sites" on page 128.
Block or allow Web sites by category.	Block, monitor, or allow access to individual Web sites or categories of Web sites.
	To block or allow access to Web sites by category, you must have the URL filtering license.
	Both features also require that the content filter module is licensed and enabled.
	See "Configuring URL filtering policies for Web sites" on page 116.
Block specific Web sites or downloads.	Use the blacklist to block access to specific Web sites or downloads.
	See "Blocking or monitoring Web sites using the blacklist" on page 132.
	See "Blocking or monitoring file transfers using the blacklist" on page 133.
Allow specific Web sites or downloads.	Use the whitelist to allow access to a specific Web site or download.
	See "Allowing Web site access using the whitelist" on page 134.
Enforce application control.	Symantec Web Gateway can allow, block, or monitor Internet access for applications with the application control policy settings.
	See "Configuring policies for Internet applications" on page 109.

Table 6-1Policy actions (continued)

Configuring the policy precedence order

Policies are evaluated in the order that they appear on the **Policies > Configuration** page. Symantec Web Gateway evaluates the policy at the top of the page first. If more than one policy applies to the same computer, only the rules in the first matching policy determine what action to take. Symantec Web Gateway ignores the policies after the matching policy.

Assume that you define a policy for malware that applies to subnet 192.168.0.0 and a separate policy for malware that applies to VLAN ID 2. If a computer on VLAN 2 using IP address 192.168.0.5 encounters malware, only the first matching policy determines the action to take.

Adjusting the precedence is usually only necessary if you mix policy workgroups of different network types. If you consistently use subnet, IP range, or VLAN ID to define all of your workgroups, new policies are inserted in the correct order. If you use workgroups of different network types in your policies, ensure that the policies are ordered as you want. Precedence is also necessary in the case of conflicting or overlapping policies of the same network type.

You can also change the order of **Spyware Category**, **Spyware Severity**, and **Detection Type** within a policy.

To configure policy precedence order

- 1 In the Web GUI, click **Policies > Configuration**.
- **2** Click an arrow symbol next to a policy to move up the policy or move down a policy.
- **3** Repeat this process for other policies until the policies are the order that you want.
- 4 Click Save and Activate Changes.

Download behavior in user Web browsers

You can configure Symantec Web Gateway policies to scan file downloads from the Internet for malware such as spyware and viruses. The **File and Active Content Detection** setting for policies determines the Web browser download behavior. The **Block** and is not available for the port span/tap network configuration.

See "About Symantec Web Gateway network configurations" on page 24.

For both the **Block** or **Monitor** actions, if the download might take longer than a few seconds, Symantec Web Gateway displays a message in the user Web browser. The message indicates that Symantec Web Gateway is scanning the download.

The contents of this patience page cannot be changed. However, you can change the language that is used on this page and the image that appears.

Note: You may experience unexpected behavior on non-supported Web browsers.

See "End user pages for blocked Web sites, file transfers, and infections" on page 137.

Table 6-2 describes the download behavior for each action.

Action	Inline, proxy, or inline and proxy network configuration	Port span/tap network configuration	Description
Block	Available	Not available	Symantec Web Gateway scans the download. If malware is detected, Symantec Web Gateway displays a message in the user browser. See "End user pages for blocked Web sites, file transfers, and infections" on page 137.
Monitor	Available	Available	Symantec Web Gateway scans the download. If malware is detected, it is recorded for display in reports.
Ignore	Available	Available	Symantec Web Gateway does not scan the download.
Use Default	Available	Not available	The action that you set for the Spyware Default is used.
Use default action for Insight	Available	Not available	The action that is set for the default Insight policy is available on the Administration > Configuration > Insight page.

 Table 6-2
 Download behavior in user Web browsers

See "About Insight reputation-based security" on page 101.

Internet applications, malware, and URL filtering blocking behavior

You can configure blocking in the following types of policies:

Application control policy	Allow, block, or monitor Internet access for applications with the application control policy settings.
	See "Configuring policies for Internet applications" on page 109.
Malware policy	Block malware, which includes spyware, viruses, worms, Trojan horses, botnets, keyloggers, and so on.
	See "Configuring policies for malware" on page 106.
URL filtering policy	Block, monitor, or allow access to categories of Web sites. To block categories of Web sites, you must have the URL filtering license.
	See "Configuring URL filtering policies for Web sites" on page 116.
	See "Preinstallation checklist" on page 19.
Blacklist	Block file downloads by file extension using the blacklist.
	See "Blocking or monitoring file transfers using the blacklist" on page 133.

Symantec Web Gateway can block file transfers, Internet applications, malware phone home attempts, and Web pages. The method that Symantec Web Gateway uses to block these activities depends on the source, action, and the policy that applies.

Table 6-3 describes these blocking methods.

96 | Configuring policies Internet applications, malware, and URL filtering blocking behavior

	8			
Blocking method	Description	Examples		
End user blocking page	For downloads and the URL access that a user initiates in a Web browser. Symantec Web Gateway displays an end user blocking page to block access. The requested action does not occur and the blocking page is displayed instead.	A user's computer is part of a malware policy. The user attempts to download a file using a Web browser. Symantec Web Gateway detects a virus in the file. Symantec Web Gateway displays a blocking page instead of allowing the file download.		
File corruption	For file uploads in a Web browser and file downloads not in a Web browser. Symantec Web Gateway also enters text into the binary to identify it blocked the file. The default text is as follows: Malware has been detected by Symantec Web Gateway.	A user's computer is part of a malware policy. The user attempts to download a file using FTP. Symantec Web Gateway detects a virus in the file. The download proceeds. However, Symantec Web Gateway corrupts the contents of the file to disable the virus.		
Interrupted connection	For malware phone home attempts, application control, and IM file transfers. Symantec Web Gateway interrupts the connection to block access.	A user attempts to use a peer-to-peer file sharing application that is blocked in an application control policy. The peer-to-peer file sharing application does not work for the user. The peer-to-peer file sharing application may display an error.		

Table 6-3Blocking methods

If you configure Symantec Web Gateway in the port span/tap network configuration, it cannot provide the same level of blocking as the inline network configuration.

See "About Symantec Web Gateway network configurations" on page 24.

Table 6-4 describes the blocking behavior for each type of policy.

Policy	Application	Application action	Browser patience page	Blocking method	Supported network configurations
Antivirus scan from malware policy	Web browsers	Download .exe, .zip, .rar, .dll, and .cab files that are over 50,000 bytes	Yes	End user blocking page	Inline, proxy, and inline plus proxy
Antivirus scan from malware policy	Web browsers	Download file	No	End user blocking page	Inline, proxy, and inline plus proxy
Blacklist block by file extension	Web browsers	Download file	No	Interrupt connection only for port span/tap	Inline, proxy, inline plus proxy, and port span/tap
Antivirus scan from malware policy	Web browsers	Upload file	No	Corrupts the file	Inline, proxy, and inline plus proxy
Blacklist block by file extension	Web browsers	Upload file	No	Interrupt connection	Inline, proxy, inline plus proxy, and port span/tap
Malware or URL filtering	Web browsers	Browse to URL	No	End user blocking page	Inline, proxy, inline plus proxy, and port span/tap
Antivirus scan from malware policy	FTP	Upload file or download file	No	Corrupts the file	Inline, proxy, and inline plus
				FTP command line (inline mode only) error message:	proxy
				226 Spyware Blkd	
Malware	Malware phone home	Any network activity	No	Interrupts connection	Inline, proxy, inline plus proxy, and port span/tap

Table 6-4Blocking behavior for policies

Policy	Application	Application action	Browser patience page	Blocking method	Supported network configurations
Application control	Applications available for application control	Any network activity	No	Interrupts connection	Inline, proxy, inline plus proxy, and port span/tap
					Some limitations for port span/tap as noted in Web GUI
Application control	IM applications	Upload file or download file	No	Interrupts connection	Inline and port span/tap Some limitations for port span/tap as noted in Web GUI
Antivirus scan from malware policy	IM applications	Upload file or download file	No	Corrupts the file	Inline, proxy, and inline plus proxy
Antivirus scan from malware policy	Applications that access the Internet, such as for software updates	Download file	No	Corrupts the file	Inline, proxy, and inline plus proxy
Antivirus scan from malware policy	Unknown Web browser applications	Download file	No	Corrupts the file	Inline, proxy, and inline plus proxy

Table 6-4Blocking behavior for policies (continued)

See "About policies" on page 90.

Specifying computers or users for policies

Policies can act on all computers that Symantec Web Gateway is aware of or policies can act on particular groups of computers. If you configure Active Directory integration, you can also create policies by user names, workgroups, and so on. If you attempt to configure a policy that includes an Active Directory user or workgroup, Symantec Web Gateway may display an error. This error occurs if the user or workgroup does not exist in your Active Directory. The problem is most likely a typo in the policy. The name or workgroup does not match the user name or workgroup in Active Directory.

To specify computers or users for policies

- 1 In the Web GUI, click **Policies > Configuration**.
- 2 At the top of the page, ensure that **Enable Policy Management** is checked. All policies are deactivated if **Enable Policy Management** is unchecked.
- 3 Click Create a New Policy.
- **4** At the top of the page, specify the following information:

Base Policy On (optional)	Optionally, click an existing policy or policy template on which to base your new policy. If you click an existing policy or policy template, the page is updated with the settings from that policy or policy template.
Policy Name	Type a name for the policy. The name appears on the Policies > Configuration page.
Policy Description (Optional)	Type a description for the policy. The description appears on the Policies > Configuration page.
Block Page Message Group	Click the group of messages to display in the Web browsers of users for a blocked Web site, blocked file download, or a malware infection. You configure message groups on Administration > End User Pages . If you have not configured message groups, click Default .
	See "End user pages for blocked Web sites, file transfers, and infections" on page 137.

	Applies to	Click one of the following options:		
		 All computers This policy applies to all computers that are specified as part of the Internal Network Configuration on the Administration > Configuration > Network page. Specific Work Groups This policy applies to the computers that you specify under Work Groups on this page. 		
5	If you clicked Specific Work Groups a Network Type and specify the cor	for Applies to , under Work Groups click nputers or users for the group.		
	To use any of the LDAP options, you integration. The ability to choose do workgroups depends on your Active	DAP options, you must have configured Active Directory ility to choose departments, organizational units, or Is on your Active Directory configuration.		
	See "About Active Directory integration" on page 171.			
	The options that you can configure	are as follows:		
	Subnet	Specify the following options:		
		 Subnet Type the IP address for the subnet. Netmask Type a subnet mask for the subnet. 		
	IP Range	Specify the following options:		
	-	 First IP Type the IP address for lowest numbered IP address in the range. Last IP Type the IP address for highest numbered IP address in the range. The first and last IP addresses that you 		

VLAN ID

Type a VLAN ID.

specify are included in the range.

LDAP Department	Click a department. The departments are populated from Active Directory. For the Other option, type a department.
	A drop-down list appears if there are 100 or fewer discovered entities. For example, if a large enterprise has over 100 departments, a text box appears, and the administrator must type the department name.
LDAP Organizational Unit	Click an organizational unit. The organizational units are populated from Active Directory. For the Other option, type an organizational unit.
LDAP Workgroup	Click a workgroup. The workgroups are populated from Active Directory. For the Other option, type a workgroup.
LDAP User Name	Type an Active Directory user name using the form that is configured in Active Directory.

6 Continue configuring the policy.

See "About policies" on page 90.

About Insight reputation-based security

Symantec Web Gateway can block, monitor, ignore, or allow access to files and other sources of malware based on file's reputation. Insight is a Symantec technology that can flag probable malware not previously known to Symantec. Symantec gathers anonymous computer usage behavior from participating Symantec customers and malware based on file reputation. Symantec combines the aggregate usage behavior with other attributes, such as the file publisher and file uniqueness, to make a reputation score for a file. You can configure the policies that allow only content with a reputation score of safe. Or you can also block content with a reputation score of unsafe. You can also monitor Internet traffic and view the content reputation for monitored files in a report.

To employ Insight, you must enable it. Symantec Web Gateway processes Insight reputation-based security after antivirus scanning.

Insight only supports Microsoft Portable Executable (PE) files. PE files include, but are not limited to: .exe, .dll, .sys, .cpl, .ocx, .scr, .drv, and .tlb.

See "Enabling Insight reputation-based security" on page 102.

See "Configuring policies for Insight reputation-based security" on page 104.

Enabling Insight reputation-based security

To employ Insight reputation-based security, you must first enable it. After you enable it, you can configure a policy that uses it.

See "About Insight reputation-based security" on page 101.

See "Configuring policies for Insight reputation-based security" on page 104.

To enable Insight reputation-based security

- 1 In the Web GUI, click Administration > Configuration > Insight.
- 2 Click Enable Insight Policies.
- 3 Click the Safe Content Confidence Setting drop-down list and select an option.

The **Safe Content Confidence Setting** is the level of confidence that Symantec has that a file is safe. You can create a policy to allow users to only download files considered safe.

The options that you can select are as follows:

Norton Trusted	Norton believes that these files are trustworthy. This is the highest level of trust.
Good (Recommended)	There are indications that these files are trustworthy. This is the recommended
	setting for most environments.

4 Click the **Unsafe Content Confidence Setting** drop-down list and select an option.

The **Unsafe Content Confidence Setting** is the level of confidence that Symantec has that a file is unsafe. You can create a policy to block users from downloading files considered unsafe.

The options that you can select are as follows:

Poor (Recommended)	There are some indications that these files are not trustworthy. This is the recommended setting.
Not Trusted	There are many indications that these files are not trustworthy. This is the lowest level of trust.

5 Click the **Default Insight Policy** drop-down list and select a default policy.

The policy that you select appears as the default action on the **Policies** > **Configuration** page under **Action** and beside **Insight**. You can still change the action as you create policies. By default, the action is **Block unsafe files**, which is the recommended setting. When you select a default policy on this page, Symantec Web Gateway uses this policy for PE file downloads. You can set Insight policies by specifying a policy action for Insight in the custom policy.

See "Configuring policies for Insight reputation-based security" on page 104.

If you do not create a specific policy, the Symantec Web Gateway default policy is based on the setting on this page. The **Use Default** action in policies inherits its setting from here.

This option is not available for the port span/tap network configuration.

- **6** Optionally, to add a file exception, do all of the following tasks:
 - Click Add a File Exception.
 - Under Filename, either type the file name or click Browse to locate the file.

Symantec Web Gateway does not support compressed files for reputation-based filtering file exceptions. It only supports Microsoft PE executable files.

The maximum file size that you can upload is 16 MB.

- Click the File Action drop-down list to specify the action that you want Symantec Web Gateway to take for the exception file.
- 7 Click Save.

Configuring policies for Insight reputation-based security

To employ Insight, you must enable it. After you enable it, you can configure a policy that uses it.

See "About Insight reputation-based security" on page 101.

See "Enabling Insight reputation-based security" on page 102.

Note: Insight is not enabled for all computers by default. To enable Insight for all computers, configure a policy for all computers and set the **Insight** action to **Use Default**, Allow Only Safe Content, Block Unsafe Content, Monitor All Content, or **Ignore Reputation**.

Note: You must install Symantec Web Gateway in your network in the inline, proxy, and inline + proxy network configuration to block file transfers. If you configure Symantec Web Gateway in the port span/tap network configuration, the block action (**Allow Only Safe Content** and **Block Unsafe Content**) is not available in the Web GUI.

See "About Symantec Web Gateway network configurations" on page 24.

To configure policies for Insight reputation-based security

- Specify the policy name and the range of computers to include in the policy. See "Specifying computers or users for policies" on page 98.
- 2 Continuing on the **Policies > Configuration** page, locate **Insight**.

3	Under Action , select one of the following options:	
	Allow Only Safe Content	Allow content based on the Safe Content Confidence Setting on the Reputation configuration page. Any content that is not considered safe is blocked.
	Block Unsafe Content	Block content based on the Unsafe Content Confidence Setting on the Reputation configuration page. Any content that is not considered unsafe is allowed.
	Monitor All Content	Do not block anything based on Insight. Instead, record the activity that is related to reputation for reports.
	Ignore Insight	Disable Insight for the current policy and do not record the activity that is related to reputation.
	Use Default	Allows the policy to use the default action that is specified in Administration > Configuration > Insight .
		See "Enabling Insight reputation-based security" on page 102.

- **4** Configure other policy settings as desired.
- 5 Click Save.
- 6 On the **Policies > Configuration** main page, click **Save and Activate Changes**.

Configuring policies for SSL Deep Inspection

To employ SSL Deep Inspection, you must enable it and you must be running an SSL proxy. After you enable SSL Deep Inspection, configure a policy that specifies the range of computers and URL categories to which SSL Deep Inspection applies. You must enable the content filter module to enable SSL Deep Inspection by URL category.

See "Configuring the Symantec Web Gateway proxy for SSL Deep Inspection" on page 83.

See "Enabling URL filtering, Internet program monitoring, and other features" on page 58.

To configure policies for SSL Deep Inspection

- Specify the policy name and the range of computers to include in the policy.
 See "Specifying computers or users for policies" on page 98.
- 2 Continuing on the Policies > Configuration page, locate SSL Deep Inspection.
- 3 Click SSL Deep Inspection policy.
- 4 If the content filter module is enabled, configure the **Content Filter Categories**.

Intercept	For the computers in this category, inspect SSL-encrypted network traffic for the URL category.
Ignore	For the computers in this category, ignore SSL-encrypted network traffic for the URL category. Do not record the activity that is related to SSL Deep Inspection for reports.

If the content filter module is not enabled, the **Content Filter Categories** and **SSL Intercept Exceptions** are not displayed. Choose a default action for SSL encrypted traffic.

- **5** Under **SSL Intercept Exceptions** you can optionally add domain names or IP addresses for which you want to intercept or ignore SSL traffic.
- 6 Click Save.
- 7 On the Policies > Configuration main page, click Save and Activate Changes.

Configuring policies for malware

Symantec Web Gateway can block file uploads and file downloads when it detects malware in the file. Symantec Web Gateway can also block infected computers from accessing the Internet. Symantec Web Gateway can block, monitor, or ignore malware by category. Generally you should block all malware for all users. If necessary, you can configure exceptions for certain categories of malware for certain computers.

See "Internet applications, malware, and URL filtering blocking behavior" on page 95.

Note: If the operating mode is set to block, malware is blocked by default. Otherwise, malware blocking for all computers is not enabled by default. To enable malware blocking for all computers, configure a policy for all computers and set the **Spyware default** action to **Block**.

The following actions are available for the **File and Active Content Detection**, **Spyware Category**, **Spyware Severity**, **Detection Type**, and **Spyware Default** settings:

Use Default	Use the Spyware Default action for this type of malware. This action is not applicable to the File and Active Content Detection or Spyware Default setting.
Block	Block this type of malware and record detected malware of this type for reports.
Monitor	Allow this type of malware but record detected malware of this type for reports.
Ignore	Allow this type of malware and do not record detected malware of this type for reports.

Note: You must install Symantec Web Gateway in your network in the inline network configuration or proxy network configuration to block file downloads. If you configure Symantec Web Gateway in the port span/tap network configuration, the block action is not available in the Web GUI.

See "About Symantec Web Gateway network configurations" on page 24.

To configure policies for malware

1 Specify the policy name and the range of computers to include in the policy.

See "Specifying computers or users for policies" on page 98.

- 2 Continuing on the **Policies > Configuration** page, locate **File and Active Content Detection**, **Spyware Category**, **Spyware Severity**, **Detection Type**, and **Spyware Default**.
- 3 Under Spyware Default, click Block, Monitor, or Ignore.

The **Spyware Default** action is the default action for the **Spyware Category**, **Spyware Severity**, and **Detection Type** settings. When you click **Use Default** for any of those settings, the **Spyware Default** action is used.

4 To configure the action for file downloads, click an action next to **File and Active Content Detection**.

See "Download behavior in user Web browsers" on page 93.

- **5** To specify an action for a specific malware category, click **Add Category** next to **Spyware Category**, click a category, and click an action.
- **6** To specify the action for malware severities, click an action under **Spyware Severity**.

Symantec Web Gateway groups malware into the following severities:

Critical	Critical malware poses an imminent security risk that can result in theft of confidential data, loss of control over the computer, or both.
Major	Major malware changes the expected system behavior, uses system resources in an unwanted manner, or both. Major malware may affect productivity.
Minor	Minor malware is a nuisance and a potential privacy risk. It primarily affects the user's browsing experience by displaying pop-ups and other ads, and may also send out browsing information.

7 To specify the action for malware detection types, click an action under **Detection Type**.

Symantec Web Gateway detects Internet traffic to and from malware on computers in your network. You can configure actions for the following detection types:

Infection	Malware has attempted to phone home to a computer outside the network. The malware is on a computer on your network.
Attack	A remote computer has attempted to access a computer on your network or to send a malicious network element such as a network worm.
Malware URL	A user has attempted to access a known malware Web site.
8 Configure other policy settings as desired.

See "Malware categories for policies" on page 111.

- 9 Click Save.
- 10 On the Policies > Configuration main page, click Save and Activate Changes.

Configuring policies for Internet applications

Symantec Web Gateway can allow, block, or monitor Internet access for applications with the application control policy settings. For example, you can prevent peer-to-peer sharing, streaming media, and Internet-dependent games from accessing the Internet for some or all computers in your network. You can configure access by category or by the specific programs that are known to Symantec Web Gateway.

All application control settings are available for inline and inline plus proxy mode. However, there are some limitations for proxy only and port tap/span operating modes.

See "About policies" on page 90.

See "Internet applications, malware, and URL filtering blocking behavior" on page 95.

Note: You must enable the application control module to monitor or block applications.

See "Enabling URL filtering, Internet program monitoring, and other features" on page 58.

Symantec Web Gateway contains network signatures for a large number of commonly used Internet applications. However, you cannot monitor or block any Internet applications that Symantec Web Gateway is not aware of.

If you block Internet access for an application, the application typically does not function normally or displays an error to the user. The cause of the malfunction may not be apparent to the user. As a best practice, you should notify users of the types of applications that you block as part of your site policy.

To configure policies for Internet applications

1 Specify the policy name and the range of computers to include in the policy.

See "Specifying computers or users for policies" on page 98.

2 Continuing on the **Policies > Configuration** page, locate **Application Control Categories**.

Block All	By default, block all applications from accessing the Internet. Attempts to use blocked applications are displayed in reports.
Allow All	By default, allow all applications to access the Internet.
Monitor All	By default, monitor all applications that access the Internet. Internet access for applications is allowed but application usage is displayed in reports.
Details All	Expand the categories to display the actions for specific applications.

3 To specify the default action type for all Internet applications that are known to Symantec Web Gateway, click one of the following options:

You can individually set the action options for specific categories or applications after selecting one of these options.

4 To specify the action type for categories, click one of the following options for the category:

Block	By default, block applications in this category from accessing the Internet. Attempts to use blocked applications are displayed in reports.
Allow	By default, allow applications in this category to access the Internet.
Monitor	By default, monitor Internet applications in this category. Internet access for applications is allowed but application usage is displayed in reports.
Details	Expand the category to display the actions for specific applications. To discard individual application settings, click Block, Allow , or Monitor beside the category.

5 Configure other policy settings as desired.

- 6 Click Save.
- 7 On the **Policies > Configuration** main page, click **Save and Activate Changes**.

Malware categories for policies

Symantec Web Gateway can block malware and spyware categories as per the configuration settings in the policies.

Table 6-5 describes the malware or spyware categories.

Table 6-5Malware or spyware categories	
Malware or spyware categories	Description
Ad-supported Program	An ad-supported program is any software package that automatically displays or downloads advertisements to a computer. These advertisements can be in the form of a pop-up and the main objective is to generate revenue.
Adware	An adware is a software package that facilitates the delivery of advertising content to the user.
Adware Bundler	Software bundling is a common type of spyware that installs several pieces of software at the same time. An adware bundler installs adware (or several pieces of adware) as part of the installation of another, desired program, and often requires the adware to run for the desired program to function. Many peer-to-peer (P2P) programs are adware bundlers.
Adware Installer	An adware installer runs stealthily on a computer, connects to external servers, downloads adware, installs adware, and updates installed adware programs.
Attack	An attack is an unauthorized attempt by one computer to remotely access another computer. A remote system or an internal system attacks a computer located within the Protected Networks defined within the Symantec Web Gateway user interface.
Backdoor	A backdoor bypasses normal security mechanisms to provide access to a computer (or other illegitimate use). Computer attackers often use backdoors as part of an exploit or Trojan horse to gain access to a user's computer.

Malware or spyware categories	Description
Botnet	Symantec Web Gateway detected a host on the network that displays network patterns that are indicative of a botnet infection.
Browser hijacker	A browser hijacker is a malicious program that changes your Web browser settings by usually altering the default start and search pages. A browser hijacker can also modify any aspect of a Web browser such as adding bookmarks, redirecting search traffic to alternative sites.
Browser plug-in	Software that is installed in your Web browser which is designed to enhance the browser's capabilities and expand its functions. Plug-ins can come in the form of toolbars, buttons, or background processes that handle special file formats. Plug-ins may be harmful because they have complete access to your Web browser and can modify, spy and redirect search, and other browsing tasks.
Critical Spyware Web site	A Web site containing malicious files or drive-by infections which directly lead to a critical infection.
Custom Restricted Lists 1, 2, and 3	The recommended use for the custom restricted lists is for you to store related blacklisted Web sites.
Destroyer	The programs crash the computer, either directly by shutting it down, or by destroying essential files.
Dialer	A dialer is a software that dials a phone number using the computer's modem. Most dialers connect to toll numbers without your awareness or permission to incur phone charges. It also includes the Web sites that distribute dialers.
Downloader	A program that is stealthily installed in your computer. After installation, it connects to a remote server and downloads additional programs and files, such as spyware. Spyware is installed in your computer without your knowledge.

Table 6-5Malware or spyware categories (continued)

Malware or spyware categories	Description
Exploit	An exploit is a file that uses the design flaws (vulnerabilities) in software and controls your system.
	The exploit is used to perform a number of actions such as downloading worms and Trojan horses. Once installed, the exploit malware accesses confidential data or crashes the software, depending on the nature and severity of the vulnerability.
	An exploits Web site is a Web site that distributes many types of spyware through various exploits in the operating systems and browsers.
Hack tool	Hacking tools are used to gain information or access hosts surreptitiously by using the methods that bypass security mechanisms. The target computer may or may not be disabled. Hacking tools may also facilitate attacks on third-party computers as part of a direct or a distributed denial-of-service attempt.
Joke program	Programs that alter or interrupt the normal behavior of your computer, creating a general distraction or nuisance.
Keylogger	A program that runs in the background and records the user's keystrokes. The logged keystrokes are hidden in the computer for later retrieval or transmitted secretly to the attacker by email or by Internet. Some keyloggers are available for commercial use.
Major Spyware Website	A Web site that contains malicious files or drive-by the infections that may directly lead to a major infection.
Malicious behavior	Malicious behavior describes executable files that display characteristics or behaviors found exclusively within malware. These files are blocked to prevent intrusion, disruption, or damage to computer systems.
Minor Spyware Website	A Web site that contains files and drive-by the infections that directly lead to a minor infection.
Misleading Application	Programs that report false or significantly misleading information on the presence of a security risk, threat, or system issue on the computer being scanned.

Table 6-5Malware or spyware categories (continued)

Malware or spyware categories	Description
P2P	P2P software is an Internet file-sharing application that causes security issues.
Parental control	Parental control programs monitor or restrict Internet access.
Password Hijacker	A password hijacker steals passwords from a user's computer. For example, the hijacker can steal logon IDs and passwords for the installed programs. The hijacker can then send the passwords remotely to the attacker.
Phishing	Phishing is a form of social engineering that is characterized by attempts to fraudulently acquire sensitive information, such as passwords and credit card details. Phishing often takes the form of an email or IM from what appears to be a legitimate business.
Potentially Unwanted Software	Any software which is not determined to belong to any other specific category. It includes software with objectionable distribution, installation, uninstallation procedures, potential privacy risks, and other questionable behaviors that lack proper consent from the user.
RAT	A Remote Administration/Access Tool (RAT) gives an attacker the ability to remotely control a user's computer over the Internet. The victim's computer usually listens on the Internet for the attacker's commands, which can control most functions on the computer. Some RATs are commercially available for legitimate use.
Remote access	Remote access tools provide a means to access PCs and their file systems remotely. The category includes programs such as pcAnywhere, VNC, Cool Remote Control , Telnet, SSH, TN3270, and more.
Rogue Security Program	A program that pretends to be a useful security tool, such as a spyware removal tool. Such security program acts as spyware or fakes security alerts to lure the user to purchase it.
Rootkit	A rootkit is a set of software tools that is designed to be invisible and placed on a computer by a third party. A rootkit is used to conceal running processes, files, or system data.

Table 6-5Malware or spyware categories (continued)

Malware or spyware categories	Description
Security Assessment Tool	Programs intended for legitimate use by administrators to assess network security, but which may be used maliciously to determine weaknesses.
Security risk	A potentially malicious program that does not fit into other categories.
Spammer	A program that can take part in an email flooding campaign.
Spyware	Spyware is any software package that tracks and sends personally identifiable information or confidential information to third parties.
Spyware Marketing and Tools	A Web site that either markets tools to develop a spyware, or attempts to recruit marketing affiliates for spyware.
Stealth Notifier	Also known as a Trojan horse Notifier or a call-home Trojan horse. A stealth notifier connects to a remote server by a stealth connection and notifies the server that the Trojan horse is installed.
Surveillance	Any software that is designed to use a webcam, microphone, screen capture, or other approaches to monitor and capture information. Such software transmits the captured information to a remote source.
System Monitor	Software that monitors system information or provides security tools. Software may be legitimate; however, it is potentially dangerous if used by unauthorized parties.
Tracking Software	Software that monitors user behavior, or gathers information about the user, sometimes including personal information. Most often, the information is sent out to be used for targeted advertising.
Trackware	Trackware is any software package that tracks system activity, gathers system information, or tracks user habits and relays this information to third-party organization.
Trojan	A malicious program that is disguised as legitimate software. Unlike a virus or a worm, Trojan horses do not replicate.
Trojan FTP	An FTP (or telnet) server that is installed on the user's computer by stealth means. An attacker can connect to this server to download files from the user's computer.

Table 6-5Malware or spyware categories (continued)

Malware or spyware categories	Description
Unclassified Critical Spyware	A program that is considered from trusted sources to be a security risk, but it is not fully analyzed to determine its precise effects.
Unclassified Spyware	Software that is suspected from trusted sources as spyware, but whose specific effects were not yet determined.
Worm	A computer worm is a self-replicating program that spreads through email or other file transmission capabilities. Worms harm the network and consume bandwidth, whereas viruses infect or corrupt files on a targeted computer.

Table 6-5Malware or spyware categories (continued)

Configuring URL filtering policies for Web sites

Symantec Web Gateway can block, monitor, or allow access to categories of Web sites. For example, you can block access to gambling Web sites, allow access to business Web sites, and monitor access to entertainment Web sites. To block Web sites by category, you must have the URL filtering license.

Symantec Web Gateway applies content filter policies to embedded URLs. However, whitelisted domains and domain exceptions that you specify in content filter policies are not applied to embedded URLs. An embedded URL is when a URL contains another URL within it. The embedded URL in the following example is badurl.com:

http://symantecexample.com/index.html/?badurl.com/home.js

See "Preinstallation checklist" on page 19.

See "URL filtering categories" on page 119.

Symantec Web Gateway does not support the ability to redirect URLs or block URLs if you use the port span/tap configuration and any of the following conditions exist:

- Your organization uses a corporate switch that implements Access Control Lists (ACL)
- Your network has a feature that prevents session hijacking

Note: You must enable the content filter module to monitor or block Web sites.

See "Enabling URL filtering, Internet program monitoring, and other features" on page 58.

When a user attempts to access a Web site in a blocked category, a message appears in the Web browser instead of the Web site. You can configure the message.

See "End user pages for blocked Web sites, file transfers, and infections" on page 137.

Note: If you use the SSL proxy, users cannot see your custom end user page when they attempt to access a domain in which no intercept policy exists. This situation can occur if you do not have an SSL intercept policy for a certain category, but you do have a content filtering blocking policy for that category. The message that they see depends on the Web browser that they use. For example, Internet Explorer displays a forbidden error message. Firefox displays a message that the proxy server refuses the connection. This issue occurs for HTTP/HTTPS or deep inspection ports.

See "Internet applications, malware, and URL filtering blocking behavior" on page 95.

You can configure content filter exceptions for specific Web sites. Content filter exceptions apply to a single policy. You set Symantec Web Gateway to allow, block, or monitor the Web site in each content filter exception. For example, assume that you set the **Spam URLs** filtering category to **Block** and that www.blocksads.com is in that category. For that policy, if you want to monitor access instead of block access, set a content filter exception for www.blocksads.com to **Allow**. These content filter exceptions act like a policy-specific blacklist or whitelist. The blacklist and whitelist in Symantec Web Gateway provide more global behavior.

See "Blocking or monitoring Web sites using the blacklist" on page 132.

See "Allowing Web site access using the whitelist" on page 134.

To configure URL filtering policies for Web sites

- Specify the policy name and the range of computers to include in the policy. See "Specifying computers or users for policies" on page 98.
- Continuing on the Policies > Configuration page, locate Multiple Categories.
 To configure after hours access, check Allow After Hours Configuration and specify those settings.

See "Allowing after hours access to Web sites" on page 128.

3 Under **Multiple Categories**, click one of the following:

Restrictive: Block takes precedence	If a block action and an allow action both apply to a Web site, the Web site is blocked. Restrictive: Block takes precedence is the default setting.
Permissive: Allow takes precedence	If a block action and an allow action both apply to a Web site, the Web site is allowed.

Web sites can be classified under more than one category. For example, a Web site selling sports equipment might be categorized as both a sports Web site and a shopping Web site. This option determines the action that Symantec Web Gateway takes if conflicting actions apply to a Web site.

4 To specify the default action type for all Web site categories, click one of the following options:

Block All	By default, block all Web site categories. Attempts to access blocked Web sites appear in reports.
Allow All	By default, allow access to all Web site categories.
Monitor All	By default, monitor all Web site categories. Access to all Web sites is allowed, but Symantec Web Gateway records visits by category for display in reports.

You can individually set the action options for specific categories or subcategories after selecting one of these options.

5 To specify the action type for categories, click one of the following options for the category:

Block All	By default, block Web sites in this category. Attempts to access blocked Web sites appear in reports.
Allow All	By default, allow access to Web sites in this category.
Monitor All	By default, monitor Web sites in this category. Symantec Web Gateway allows access to Web sites in this category. Symantec Web Gateway records visits by category in reports.

See "URL filtering categories" on page 119.

- 6 To specify the action type for subcategories, click **Block**, **Allow**, or **Monitor**.
- 7 To configure access for a specific Web site or IP address, click Add an Exception.

Specify a domain name or IP address and then click an action type. If you specify a domain name, type only the domain name. Omit the http://prefix and any slashes such as for folders in the URL.

Alternatively, you can click an action type and import a text file that contains one domain name or IP address per line. The action type you click is set for all addresses in the file.

- **8** Configure other policy settings as desired.
- 9 Click Save.
- **10** On the **Policies > Configuration** main page, click **Save and Activate Changes**.

URL filtering categories

 Table 6-6 describes the URL filtering categories available in Symantec Web

 Gateway. Use these categories when you create URL filtering policies.

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Category	Description
Computer Crime (plus Hacking)	Includes manuals for malware programming, credit card misuse and the illegal manipulation of electronic devices, data networks, and software.
Illegal Activities	This category includes activities, such as manuals for bomb building or murder, instructions for illegal activities, child pornography, and so on.
Political Extreme (plus Hate and Discrimination)	Contains Web sites of politically extreme groups racism, sexism, suppression of minorities and extremists.
Warez (plus Software Piracy)	This category contains Web sites that enable the unauthorized use of copyright protected material such as software, movies, music, and so on.

Table 6-6 URL filtering category: Criminal Activities

Table 6-7URL filtering category: Drugs

Category	Description
Alcohol	Includes Web sites that deal with alcohol as a pleasurable activity (for example wine, beer, liquor, breweries) and the producers of alcoholic beverages.
Illegal Drugs	Web sites that glorify the use of drugs and Web sites about utilities for drug use.
Self-Help (plus Addiction)	Web sites from self-help groups, marriage counseling and help for addiction problems.
Tobacco	Web sites that deal with tobacco as a pleasurable activity (for example cigarettes, cigars, pipes) and the producers of tobacco.

Table C 0	UDL filtering category, Entertainment	
1 able 6-8	UKL IIItering category: Entertainment	

Category	Description
Art (plus Museums and Theaters)	Includes Web sites from the area of arts, Theaters, museums, monuments and exhibitions.

Category	Description
Cinema (plus Television)	Includes Web sites in the area of cinema, television, program information, video on demand, movie rental services and Web sites that inform about actors. Social Media sites are not listed here but in their own category.
Humor (plus Cartoons)	This category contains sites with humorous content such as comedians, jokes, comics, cartoons, and so on.
Literature (plus Books)	This category contains literature such as novels, poems, cooking books and recipes, advisories, and so on.
Music (plus Radio Broadcast)	Includes Web sites from radio stations, online radio, news and talk radio, radio hosts, audio downloads, audio streams, homepages of bands, record labels and music publishers. Social Media sites are not listed here but in their own category.
Recreational Facilities (plus Theme Parks)	This category contains Web sites about organizations for recreational activities, for example public swimming pools, zoos, fairs and amusement parks.
Social Media	Includes Web sites that enable users to view, search for, rate and publish media files and streams.

Table 6-8URL filtering category: Entertainment (continued)

Table 6-9URL filtering category: Extreme

Category	Description
Extreme (plus Violence)	Includes Web sites that are normally assigned to other categories, but are particularly extreme in their content (for example, violence).

Table 6-10URL filtering category: Finance

Category	Description
Banking	This category contains Web sites such as bank offices, credit unions, online banking.

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Category	Description
Brokers (plus Stock Exchange)	Includes Web sites about stock, options and futures brokerage/trading and exchange rates.
Financial Services (plus Insurance and Real Estate)	This category contains Web sites about real estate, insurance and financial services such as construction financing, loans, credit cards, and so on.

Table 6-10URL filtering category: Finance (continued)

Table 6-11	URI	filtering	category:	Games
	OIL	micing	category.	uunics

Category	Description
Computer Games	Web sites of the computer and video game industry, online gaming zones or Web sites dealing with these topics.
Gambling (plus Lottery)	Includes lottery organizations, casinos and betting agencies.
Toys	Web sites that inform about scale models, board games, dolls, and so on, and Web sites of the toy industry.

Table 6-12 URL filtering category: General Business

Category	Description
General Business	This category includes Web sites of industry, business, economy and supply of services.

Table 6-13URL filtering category: Information

Category	Description
Blogs (plus Bulletin Boards)	This category contains newsgroups, bulletin boards, blogs and comments. Dating sites, Social Networking sites and Business Networking sites are not listed here but in their own categories.

Category	Description
Chat	This category contains Web sites with chat rooms and online messengers. Instant Messaging sites are no listed here but in their own category.
Digital Postcards	Includes Web sites that allow people to send digital postcards.
Instant Messaging	This category contains Web sites that enable users to communicate through Instant Messaging such as ICQ, MSN, AIM, Skype, GTalk, Jabber, Y!M, myspaceim, and so on.
Mobile Telephony	Includes Web sites of mobile phone operators and manufacturers, mobile phone accessories and Web sites that enable users to send text messages (SMS).
News (plus Magazines)	This category contains Web sites with news, headlines and magazines.
Search Engines (plus Web Catalogs and Portals)	This category contains search engines, Web catalogs and Web portals. Dating sites, Social Networking sites, and Business Networking sites are not listed here but in their own categories.
Webmail (plus Unified Messaging)	This category contains Web sites from the area of Web-Personal Information Management (Web-PIM) such as email, calendar, tasks, fax, voicemail, and so on.

Table 6-13URL filtering category: Information (continued)

Table 6-14	URL filtering category: IT

Category	Description
Anonymous Proxies	Includes Web sites that allow the user to surf anonymously.
Communication Services	Includes Web sites such as Web hosting and Internet Service Providers.
IT Security (plus IT Information)	This category contains Web sites that inform people about security, privacy and data protection.

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Category	Description
Software-Hardware	This category includes Web sites from the area of software, computer hardware and other electronic components.
Web Site Translation	This category contains Web sites that enable the translation of parts or the entire content of a Web site into another language.
Web Storage	This category includes Web sites that offer file system-like services to share or backup files, often combined with user definable access rights.
Table 6-15 URL filtering category: Job Search	
Category	Description
Iob Search	Includes Web sites within the area of job

offerings, job searches, job agencies, labor exchanges, temporary work, and so on.

Table 6-14URL filtering category: IT (continued)

Table 6-16URL filtering category: Lifestyle

Category	Description
Architecture (plus Construction and Furniture)	This category contains Web sites such as architects/architecture, contractors/construction, furniture, interior design, home improvement, and so on.
Dating	This category contains Web sites that allow users to meet online and possibly develop a romantic or sexual relationship and escort services. Social Networking sites or Business Networking sites are not listed here but in their own categories.
Environment (plus Climate and Pets)	This category contains Web sites about weather, climate, pets, national parks, gardening, environment protection, and so on.
Fashion (plus Cosmetics and Jewelry)	This category contains Web sites in the area of fashion, cosmetics, jewelry, perfume, fashion models and model agencies.

Category	Description
Restaurants (plus Entertainment Venues)	This category contains Web sites about bars, discos, music festivals, restaurants and fast food restaurants.
Sports	This category contains Web sites about sports such as scores, results, clubs, teams, events, organizations, and so on.
Travel	Includes Web sites about sights, travel agencies, hotels, resorts, motels, airlines, airports, railways, car rental agencies and tourist information.

Table 6-16URL filtering category: Lifestyle (continued)

Category	Description
Malware	This category contains Web sites that install data transmitting programs without the user's knowledge.

Table 6-18URL filtering category: Medicine

Category	Description
Abortion	This category contains Web sites that deal with abortion.
Health	This category contains Web sites about physical and mental health, diseases, pharmaceuticals, hospitals, doctors, drugstores, nursing and elder care.

Table 6-19URL filtering category: Ordering

Category	Description
Auctions (plus Classified Ads)	Includes auction sites, auction houses, marketplaces and classified ads.
Banner Advertisements	Includes Web sites for ad-serving services, ad servers and pay-to-surf services.

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Category	Description
Shopping	Includes Web sites of retailers and wholesalers, sites offering price comparisons and online shops.

Table 6-19URL filtering category: Ordering (continued)

 Table 6-20
 URL filtering category: Personal Web Sites

Category	Description
Personal Web Sites	This category contains Web sites with personal content. Dating sites, Social Networking sites and Business Networking sites are not listed here but in their own categories.

Table 6-21URL filtering category: Pornography

Category	Description
Erotic (plus Sex)	Includes Web sites containing erotic photography and erotic material, as can be found on television or obtained free of charge from magazines. Sex toys are also in this category. Sexually explicit activities are not listed here.
Pornography	Includes Web sites containing the depiction of sexually explicit activities and erotic content unsuitable to persons under the age of 18.
Swimwear (plus Lingerie)	Includes Web sites containing nudity, but with no sexual references. Includes bikini, lingerie and nudity.

Table 6-22 URL filtering category: Social Networking

Category	Description
Business Networking	This category contains web portals that provide a virtual community to cultivate business contacts.

Category	Description
Social Networking	This category contains Web portals that provide a virtual community to find and connect to people interested in a particular shared subject. The sites enable their members to publish profiles including personal data/media and provide interpersonal communication channels. Business Networking sites are not listed here but in their own category.

Table 6-22	URL filtering category: Social Networking (continued)

Table 6-23	URL filtering category. Society
Table 0-25	UNL Intering category. Juliety

Category	Description	
Cities (plus regions and countries)	Includes Web sites of municipalities, countries and online mapping services.	
Education	Includes e-learning Web sites, dictionaries, encyclopedias, scientific literature and educational institutions such as universities, colleges, schools, kindergartens, and so on.	
Governmental Organizations	Includes Web sites with content for which governmental organizations are responsible (e.g. Government branches or agencies, Police Departments, Fire Departments) and international governmental organizations such as the United Nations or the European Union.	
Non-Governmental Organizations	Includes the Web sites of non-governmental organizations such as clubs, communities, non-profit organizations and labor unions.	
Political Parties	This category contains Web sites of political parties and politicians.	
Religion	Includes Web sites with religious content, information about the five main religions, and religious communities that have emerged out of these religions.	
Sects	This category contains sites about sects, cults, occultism, Satanism, and so on.	

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Category	Description
Phishing URLs	This category includes Web sites that are contained in phishing emails.
Spam URLs	This category contains Web sites that are solicited in spam emails.

Table 6-24URL filtering category: Spam

 Table 6-25
 URL filtering category: Vehicles

Category	Description
Vehicles	This category contains Web sites about automobiles, car tuning, car-exhibitions, motorbikes, airplanes, ships, bikes, railways, and so on.

 Table 6-26
 URL filtering category: Weapons

Category	Description
Weapons (plus Military)	This category contains Web sites from military organizations/companies and sites about weapons of any type.

Table 6-27 URL filtering category: Unclassified

Category	Description
Unclassified	URLs that have not been classified into any of the other categories.

See "About policies" on page 90.

See "Configuring URL filtering policies for Web sites" on page 116.

Allowing after hours access to Web sites

You can configure Symantec Web Gateway to allow users to access categories of Web sites outside of normal working hours. For example, you can block access to entertainment Web sites during working hours but allow access after working hours. You specify non-working days and the times for after hours access. To allow after hours access, you must have the URL filtering license. The after hours setting applies to URL filtering only. See "Configuring URL filtering policies for Web sites" on page 116.

To allow after hours access to Web sites

- Specify the policy name and the range of computers to include in the policy.
 See "Specifying computers or users for policies" on page 98.
- 2 Continuing on the **Policies > Configuration** page, locate **After Hours Settings**.
- **3** Click **Allow After Hours Configuration**.
- **4** To assign an entire day as a non-working day, check the box for that day of the week beside **Non-Working Days**.

The 24 hour period for a day is considered the after hours period.

5 For **After Hours Start**, click the hour and minute after which after hours exceptions apply on working days.

Working days are the days unchecked beside Non-Working Days.

- **6** For **After Hours End**, click the hour and minute before which after hours exceptions apply on working days.
- 7 Under After Hours Exception, specify the after hours behavior for Content Filter Categories.

See "Configuring URL filtering policies for Web sites" on page 116.

To copy the working hour settings to the **After Hours Exception**, click **Copy from All Times**.

- **8** Configure other policy settings as desired.
- 9 Click Save.
- **10** On the **Policies > Configuration** main page, click **Save and Activate Changes**.

Quarantining infected computers

When a computer is quarantined, users on that computer see a blocking page in the Web browser for every URL. Symantec recommends that you create a specific blocking page for quarantined computers. Based on your policy, the blocking page for quarantined computers can include malware cleanup information and contact information for your site's IT help desk.

You must first enable **Client Scan and Cleaning**. Then you can assign infected computers to the quarantine.

You may want to configure a **Block Page Message Group** specific to the quarantined computers.

See "End user pages for blocked Web sites, file transfers, and infections" on page 137.

See "About end user pages" on page 136.

You can configure a policy to quarantine infected computers in either of the following ways:

- With the Client Remediation option See "To enable Client Scan and Cleaning" on page 130.
- By assigning infected computers to the quarantine
 See "To assign infected computers to the quarantine" on page 130.

To enable Client Scan and Cleaning

• In the Web GUI, click Administration > Configuration > Client Remediation.

You can set the default action for all computers to Quarantine, or optionally create Infected Client Cleanup policies for specific workgroups.

To assign infected computers to the quarantine

1 Specify the policy name and the range of computers to include in the policy.

See "Specifying computers or users for policies" on page 98.

- 2 Continuing on the **Policies > Configuration** page, locate **Infected Client Cleanup**.
- **3** Optionally, click **Use this policy for cleanup settings only** to hide other policy settings.
- 4 Beside Prompt Infected Clients in Work Groups, click Quarantine.
- **5** Configure other policy settings as desired.
- 6 Click Save.
- 7 On the Policies > Configuration main page, click Save and Activate Changes.

Configuring NTLM user authentication behavior

If you configure Active Directory integration with NTLM, you can control authentication behavior with a policy. By periodically authenticating users, Symantec Web Gateway can enforce the policies that employ Active Directory user names or groups and track user activity in reports.

See "About Active Directory integration" on page 171.

To configure NTLM user authentication behavior

1 Specify the policy name and the range of computers to include in the policy.

You can configure the range of computers using IP range and subnet based workgroups but not using any of the LDAP **Network Types**.

See "Specifying computers or users for policies" on page 98.

- 2 Continuing on the **Policies > Configuration** page, locate **User Authentication**.
- **3** Click Authentication settings policy.
- 4 Click one of the following:

Ignore Authentication	Never authenticate the specified range of computers. This option may be appropriate for configuring exceptions for administrators and servers running without a user.
Enforce Authentication	When user credentials expire, check for and enforce authentication. Selecting this option may result in authentication request in user Web browsers. If users fail authentication, a blocking page appears in the Web browser.
Authenticate, No Enforce	When user credentials expire, check for but do not enforce authentication.
	To prevent authentication dialog boxes if you select this option, ensure that all of the following conditions are met:
	 User Web browsers are set to automatically logon to the intranet Symantec Web Gateway has a host name The Use Interface Name for NTLM Authentication box is checked on the Administration > Configuration >
	Authentication page.

5 Click Save.

6 On the **Policies > Configuration** main page, click **Save and Activate Changes**.

Blocking or monitoring Web sites using the blacklist

You can block or monitor specific Web sites by adding them to the blacklist. When you add a Web site to the blacklist, it affects all policies. If a URL access occurs that matches the blacklist entry, Symantec Web Gateway checks for a matching policy for the computer. The **Spyware Severity** and **Spyware Category** in the matching policy determine the action that Symantec Web Gateway takes.

You can also block and monitor specific Web sites for a single policy using content filter exceptions. The default setting in the monitoring mode is to monitor. Because they act on single policies only, content filter exceptions provide a more targeted method of blocking and monitoring Web sites. You need the URL filtering license to configure content filter exceptions. You do not need the URL filtering license to block or monitor Web sites with blacklists.

Symantec Web Gateway supports custom blacklist policies over HTTPS. It is unsupported over SSL Deep Inspection.

See "Configuring URL filtering policies for Web sites" on page 116.

To block or monitor Web sites using the blacklist

- 1 In the Web GUI, click **Policies > Blacklist**.
- 2 Click Add a Blacklist Entry.

You can also add blacklist entries from a text file. You assign the same **Category** and **Severity** for all domain names and IP addresses in the file.

List one domain name or IP address per line in the file. You can optionally add one or more keywords to the file. Separate keywords from the domain name with a comma. You should separate multiple keywords with spaces.

3 Type a **Name** for the blacklist entry.

The name appears on the blacklist page and in reports.

- 4 For Block Type, click Block by URL.
- 5 For **Domain or IP**, type the Web site domain name or IP address.

For example, type **www.example.com** to monitor or block all URLs that start with www.example.com. Use an asterisk as a wildcard for part of the domain. For example, type ***.example.com** to match URLs that start with <code>example.com</code>, www.example.com, and <code>mail.example.com</code>. Omit the <code>http://</code> part of a URL. Omit any part of a URL other than the domain name. **6** For **Keyword** you can optionally type a partial URL to associate with the domain specified in **Domain or IP**.

For example, if you type warez, the following URLs would match: www.example.com/warez/index.html and www.example.com/folder/warez.html.

The asterisk wildcard is not valid for **Keyword**. Omit slashes in the **Keyword**.

7 For **Description**, type a description.

The **Description** appears on the blacklist page and in reports.

8 Click a Severity.

The blacklist **Severity** relates to the policy **Spyware Severity**. The action that you set for **Spyware Severity** in a matching policy applies to the blacklist entry. The **Severity** is also recorded and used in reports.

9 Click a Category.

The blacklist **Category** relates to the policy **Spyware Category**. The action that you set for **Spyware Category** in a matching policy applies to the blacklist entry. In addition to the predefined categories, you can assign the URL to one of the three Custom Restricted Lists. The **Category** is also recorded and used in reports.

10 Click Save.

Blocking or monitoring file transfers using the blacklist

You can block or monitor file downloads and file uploads by specifying the file extension and, optionally, file contents in the blacklist. Symantec Web Gateway does not verify that the contents of the file match the extension.

If a file transfer occurs that matches the blacklist entry, Symantec Web Gateway checks for a matching policy for the computer. The **Spyware Severity** and **Spyware Category** in the matching policy determine the action that Symantec Web Gateway takes on the file transfer.

To block or monitor file transfers using the blacklist

- 1 In the Web GUI, click **Policies > Blacklist**.
- 2 Click Add a Blacklist Entry.
- **3** Type a **Name** for the blacklist entry.

The name appears on the blacklist page and in reports.

- 4 For Block Type, click Block by File Extension.
- **5** Optionally, click a **File Type** to populate **File Extension** with commonly used extensions for that file type.
- 6 Type file extensions to match in the File Extension box.

If you click a **File Type**, you can add or delete file extensions. Separate each file extension with a comma. The asterisk wildcard is not valid for **File Extension**. Omit periods when typing a file extension.

7 Optionally, for **Keyword** you can type text to match in the contents of files.

Only files with the extensions that you specify that contain at least one of the keywords match. Separate multiple keywords with commas. The asterisk wildcard is not valid for **Keyword**.

8 Under File Direction, click one of the following options:

Outbound	Block the matching files that users attempt to upload to a remote computer.
Inbound	Block the matching files that users attempt to download.
Any	Block the matching files that users attempt to upload or download.

9 In the **Description** box, type a description.

This **Description** appears on the blacklist page and in reports.

10 Click a **Severity**.

The blacklist **Severity** relates to the policy **Spyware Severity**. The action that you set for **Spyware Severity** in a matching policy applies to the blacklist entry. The **Severity** is also recorded and used in reports.

11 Click a Category.

The blacklist **Category** relates to the policy **Spyware Category**. The action that you set for **Spyware Category** in a matching policy applies to the blacklist entry. The **Category** is also recorded and used in reports.

12 Click Save.

Allowing Web site access using the whitelist

You can allow access to Web sites or network locations using the whitelist. Whitelist entries are globally allowed. You do not have to configure a policy to activate whitelist entries. Access is allowed to a Web site or network on the whitelist despite any matching policies and the visit is not recorded for reports.

Warning: When you add an address to the whitelist, network traffic to and network traffic from that address is not scanned for malware. If the address is a Web site domain, any URL that starts with that domain is excluded from malware scanning.

You can also allow access to specific Web sites for a single policy using content filter exceptions. Because they act on single policies only, content filter exceptions provide a more targeted method of allowing access to Web sites.

Symantec Web Gateway applies content filter policies to embedded URLs. However, whitelisted domains and domain exceptions that you specify in content filter policies are not applied to embedded URLs. An embedded URL is when a URL contains another URL within it. The embedded URL in the following example is badurl.com:

http://symantecexample.com/index.html/?badurl.com/home.js

The Symantec Web Gateway proxy does not support IP-based whitelisting, but it does support domain-based whitelisting. If you want to whitelist a server, you must use a proxy auto-configuration (PAC) file. If you want to whitelist a client's computer, do not configure client the browser to use the Symantec Web Gateway proxy service.

See "Sample proxy auto-configuration (PAC) file" on page 193.

See "Configuring URL filtering policies for Web sites" on page 116.

To allow Web site access using the whitelist

- 1 In the Web GUI, click **Policies > Whitelist**.
- 2 Click Add a Whitelist Entry.

You can also add whitelist entries from a text file. List one domain name or IP address per line in the file.

3 Type a domain name, IP address, or subnet specified in CIDR notation for the whitelist entry.

For a Web site, do not type a complete URL. Only type the domain name part of the URL.

4 Under Actions, check Whitelist.

5 Under **Actions**, check **Ignore Authentication** if you do not want Symantec Web Gateway to authenticate end users when they access the address.

This option is applicable if you have configured Active Directory integration with NTLM.

See "About Active Directory integration" on page 171.

See "Sample proxy auto-configuration (PAC) file" on page 193.

6 Optionally, under **Comment** type a comment.

This comment appears on the whitelist page.

7 Click Save.

About the blocking feedback report

The blocking feedback report lists the blocked Web sites or files that users at your site think have been blocked in error. If you configure policies to block spyware or Web sites, Symantec Web Gateway displays a blocking page instead of the original content. By default, the blocking page includes a link for users to click if they think that the content should not have been blocked. You can disable this link.

See "About end user pages" on page 136.

See "About policies" on page 90.

The blocking feedback report is located at **Policies > Blocking Feedback**. On the blocking feedback report you can add a Web site or file to the whitelist or delete the request. You can also submit Web sites to Symantec's Web site categorization service for review.

See "Allowing Web site access using the whitelist" on page 134.

About end user pages

A message appears in the user's Web browser indicating a blocked Web site, blocked file upload or download, or a malware infection. The page that appears is called an end user page. For example, you can configure Symantec Web Gateway to display an end user page if a user attempts to access a gambling Web site. If a user attempts to view a gambling Web site, Symantec Web Gateway displays the end user page instead of the gambling Web site. You can change the text that Symantec Web Gateway displays for a blocked Web site, blocked file transfer, or a malware infection. See "End user pages for blocked Web sites, file transfers, and infections" on page 137.

To block file transfers, you must install Symantec Web Gateway in the inline network configuration or proxy network configuration, not the port span/tap network configuration.

When no Quarantine Policy is configured, Symantec Web Gateway sends an end user page to its Quarantined end user clients. As the end user page displays an URL with host name, instead of displaying an URL with Symantec Web Gateway IP address. You cannot access the quarantined end user page, because the URL contains a host name. Symantec recommends that you add the host name of the Management Interface to your local DNS server.

See "Quarantining infected computers" on page 129.

See "About policies" on page 90.

End user pages for blocked Web sites, file transfers, and infections

End user pages provide your users with information about blocked Web sites, blocked file uploads and downloads, and possible infections. You can customize many of these settings for end user pages.

For downloads longer than a few seconds, Symantec Web Gateway displays a patience page if blocking or monitoring applies to the Web page. The text of this patience page cannot be changed. However, you can change the language that is used on this page and the image that appears. The **Language** and **New Image** settings that are described in Table 6-28 apply to the patience page.

See "Download behavior in user Web browsers" on page 93.

Note: If you use the SSL proxy, users cannot see your custom end user page when they attempt to access a domain in which no intercept policy exists. This situation can occur if you do not have an SSL intercept policy for a certain category, but you do have a content filtering blocking policy for that category. The message that they see depends on the Web browser that they use. For example, Internet Explorer displays a forbidden error message. Firefox displays a message that the proxy server refuses the connection. This issue occurs for HTTP/HTTPS or deep inspection ports.

Text that is enclosed in percent signs represents variables. These variables are replaced with specific text when a user sees the message.

See "Variables for end user pages" on page 140.

See "About end user pages" on page 136.

Table 6-28 and Table 6-29 describe the settings for the messages that SymantecWeb Gateway displays to end users.

Item	Default	Description
Message Group	Default	The blocked Web site message group to edit. By configuring multiple message groups, you can display different messages for different blocked Web site policies. See "Specifying computers or users for policies" on page 98.
Language	English	Display the default text in the selected language. In the Web page that appears to the user, supporting text, such as the text for user feedback, appears in the selected language.
Header Image	Symantec Web Gateway logo	The default image that is located at the top of the Web page that appears to the user.
New Image	No default	Import a different image than the Symantec Web Gateway logo for the top of the Web page that appears to the user.
URL Block text	This URL, %domain%, is a known %category% location and violates company policy.	Text that appears when the user attempts to access a blocked Web site.
Download Block Text	The file, %filename%, contains %category% and violates company policy.	Text that appears when the user attempts to upload or download a blocked file.

 Table 6-28
 Blocked URL or File Message Configuration

Item	Default	Description
Allow user feedback	Checked	Include text and a link in the Web page to allow users to request access to a blocked Web site or file. The following text appears in the Web page if the box is checked:
		If you think this detection was in error, please click here. When users click the link, a dialog box indicates that the
		IT department has been notified. To check for these user submissions, click Policies > Blocking feedback.

 Table 6-28
 Blocked URL or File Message Configuration (continued)

In Table 6-29, the detected pages and scheduled cleaning pages only apply if you enable Client Remediation. If you use version 5.0 or later, you must provide your own remediation URL. Also note that these are the pages that appear to quarantined users.

Table 6 20	Spyware Detected Page 8	Schodulod Clo	aning Configuration
Table 6-29	Spyware Delected Fage o	a Scheduled Cle	anning Conniguration

Item	Default	Description
Detected Page Header Text	Spyware activity has been detected coming from your current IP address %IP%	Text that appears in bold font at the top of the end user page when spyware has been detected on a computer.
Detected Page Body Text	Your system may be infected by the following or other unidentified spyware:	Text that appears in normal font when spyware has been detected on a computer. In the default text, the detected spyware is listed.

Item	Default	Description
Scheduled Cleaning Header Text	An Anti-Spyware scan has been scheduled for your current IP address %IP%	Deprecated for Symantec Web Gateway customers. It applies only to legacy Mi5 Networks customers.
Scheduled Cleaning Body Text	No default	Deprecated for Symantec Web Gateway customers. It applies only to legacy Mi5 Networks customers.
Allow user cleanup	Checked	Deprecated for Symantec Web Gateway customers. It applies only to legacy Mi5 Networks customers.
Allow cleanup bypass	Checked	Deprecated for Symantec Web Gateway customers. It applies only to legacy Mi5 Networks customers.
Show Symantec Logo	Checked	Display the Symantec logo on the top of the Web page that appears to the user when spyware has been detected on a computer.

Table 6-29	Spyware Detected Page & Scheduled Cleaning Configuration
	(continued)

Variables for end user pages

Symantec Web Gateway lets you use variables for end user page messages. These variables are replaced with specific text when a user sees the end user page. For example, if a user attempts to access a gambling Web site in violation of policy, the %category% variable is replaced with the word gambling. The variables are not case-sensitive, so %ip% and %IP% are equivalent.

See "End user pages for blocked Web sites, file transfers, and infections" on page 137.

To use variables in a URL that displays in the end user page, type the encoded version. For example, to display the threat name, category, and severity in a URL, type the URL as follows:

```
<a href=http://myserver/myscript?name=%threat-name-encoded%
&category=%category-encoded%&severity=%severity-encoded%">Click here</a>
```

Table 6-30 describes variables available for the messages in end user pages.

Variable	Encoded version	Description	Blocked URL	Blocked file	Detected page	Scheduled cleaning page
%category%	%category-encoded%	The threat category, such as spyware.	Yes	Yes	No	No
%domain%	-	The domain name of the blocked URL including subdomains. The prefix, such as http://, and any part of the URL after the domain name is omitted from %domain%.	Yes	No	No	No
%filename%	%filename-encoded%	The name of the file that was blocked.	No	Yes	No	No
%ip%	-	The IP address of the computer.	Yes	Yes	Yes	Yes
%policy%	<pre>%policy-encoded%</pre>	The name of the policy group that the IP address or user belongs to.	Yes	Yes	Yes	Yes
%severity%	-	The severity of the threat: minor, major, or critical.	Yes	Yes	No	No
%threat-description%	-	A sentence or short paragraph describing the threat.	Yes	Yes	No	No
%threat-id%	-	The unique identification number of the threat.	Yes	Yes	No	No
%threat-name%	%threat-name-encoded%	The name of the threat.	Yes	Yes	No	No

Table 6-30Variables for end user pages

Variable	Encoded version	Description	Blocked URL	Blocked file	Detected page	Scheduled cleaning page
%url%		The URL that was blocked.	Yes	No	No	No

Table 6-30Variables for end user pages (continued)

Chapter

Administering Symantec Web Gateway

This chapter includes the following topics:

- About system users
- About database and software updates
- About alerts
- About backing up and restoring the Symantec Web Gateway configuration
- Resetting Symantec Web Gateway to factory settings
- Resetting the Web GUI password for the primary system user
- Serial Console access to Symantec Web Gateway

About system users

You create the primary system user logon name and password when you run the setup wizard. You can create additional accounts for users to access Symantec Web Gateway. You can distribute the primary account name and password to all users who need to access the Web GUI at your site. However, by assigning a system user account to everyone with access to the Web GUI, you can track who has made which changes to Symantec Web Gateway. You can also set permissions and roles for system users to control access to Web GUI pages and reports.

See "Creating system users" on page 146.

See "Creating roles for system users" on page 145.

See "Monitoring system user activity" on page 147.

Permissions for system users

When you create or edit a system user, you choose the type of permission to grant the system user. Permissions control access to certain areas of the Web GUI. You can control access specifically to reports by creating and assigning roles.

See "About roles for system users" on page 144.

Permission type	Blocked Web GUI areas	Read-only Web GUI areas	Editable Web GUI areas
Read Only	 Administration > System Users Administration > Configuration 	 Administration > System Status Administration > Updates Administration > End User Pages 	Reports
Read & Write	 Administration > System Users Administration > Configuration 	 Administration > System Status Administration > Updates Administration > End User Pages 	ReportsPolicies
Administration	All areas are accessible.	No areas are read only.	All areas can be edited.

Table 7-1Permissions for system users

About roles for system users

You can create and assign roles to system users to permit access to certain types of report data. For example, you can create a role that only allows a system user to access report data for accounting computers. If you have configured Active Directory integration, you can configure access to report data by Active Directory departments or organizational units.

See "About Active Directory integration" on page 171.

Only the report data that matches the role restrictions is displayed to system users. System users can display all the Web GUI reports, but the data in each report is limited to the configured role restrictions. If a system user has a role, the Web GUI does not indicate that the report data is limited.
Example number	Role settings	Effect
Example 1	 Role Name: AD_department Select Filter Data: Department Select Filter Condition: Equals Filter-specific data: Marketing 	If a system user with the role of AD_department views any report, only the report data for users in the Marketing department is displayed. You must configure Active Directory integration to employ any role restrictions that use Active Directory groups or user names. See "About Active Directory integration" on page 171.
Example 2	 Role Name: ip_range Select Filter Data: Local IP address Select Filter Condition: In Subnet Filter-specific data: 10.10.10.0/24 	If a system user with the role of ip_range views any report, only the report data for users in the 10.10.10.0/24 subnet is displayed.

Table 7-2Examples of role behavior

Permissions are another way to control the type of Web GUI access that is permitted to system users.

See "Permissions for system users" on page 144.

Creating roles for system users

You can create and assign roles to system users to control system user access to report data. After you create a role, you can assign a role to a new system user or existing system user.

See "About roles for system users" on page 144.

You must be logged into the Web GUI as a system user with **Administration** permissions to configure a role.

You can create global or local roles on a Central Intelligence Unit. Global roles are available for system users on all managed appliances and system users that were created on the Central Intelligence Unit. Local roles are only available for system users on specific managed appliances.

To configure roles for system users

- **1** In the Web GUI, click **Administration > System Users**.
- 2 Next to User Roles, click Define a New Role.

3 For **Role Name**, type a name for the role.

The **Role Name** is displayed in the **Role** list when you create or edit a system user. The **Role Name** is also displayed in the **Role** column on the list of users on the **Administration > System Users** page.

4 You can optionally type a **Description** for the role.

The **Description** that you type for a role is displayed in the **Description** column on the list of roles on the **Administration > System Users** page.

5 Under **Role Restrictions**, set the following filter attributes for the role.

Select Filter Data	Click the type of report data to make available to system users assigned this role such as the URL filtering category or protocol type.
Select Filter Condition	Click the filter condition.
Filter-specific data	For some filter data, an option may be displayed to select a specific type of data, such as the category for URL filtering.

6 If you want to add an additional filter to the role, click Add Restriction.

The conditions in any of the filters must be true for system users with that role to see report data of that type. For example, if you specify two filters for a role, the report data that matches either filter appears for system users with that role.

7 Click Save.

You can assign a role to a new system user when you create that system user account.

See "Creating system users" on page 146.

Creating system users

You create the primary system user logon name and password when you run the setup wizard. You can create additional accounts for users to access Symantec Web Gateway. When you create a system user, you assign a permission to the system user. You can also assign a role to a system user to limit access to report data.

See "Permissions for system users" on page 144.

See "Creating roles for system users" on page 145.

You can configure password restrictions on the **Administration > Configuration > Security** page.

To create system users

- 1 In the Web GUI, click **Administration > System Users**.
- 2 Click Create a User.
- **3** Specify the following information for the new system user:

Name	The name that users type on the logon page to logon to the Web GUI.
Password	Password for the system user.
Reenter Password	Confirm the password that you typed.
Role	If you have created roles, you can assign a role to the new system user.
	The default option is N/A . Use this option if there is no role for system user.
	See "About roles for system users" on page 144.
Description (Optional)	The Description appears when you edit a system user.
Email Address	Default email address to send reports to. If this system user chooses to email a report, this email address is placed in the Email Address(es) box, but can be edited.
Permissions	Set access to parts of the Web GUI. See "Permissions for system users" on page 144.

4 Click Save.

Monitoring system user activity

You can view a list of all major changes to Symantec Web Gateway sorted by system user and time.

To monitor system user activity

1 In the Web GUI, click Administration > System Status.

The most recent changes to Symantec Web Gateway are listed at the bottom of the page.

2 To view the complete list of changes to Symantec Web Gateway, click **more** next to **Recent System Changes**.

About database and software updates

Table 7-3 describes the types of updates that Symantec provides for Symantec Web Gateway. For both types of updates, you can configure Symantec Web Gateway to check for and install updates automatically or you can check for and install updates manually.

Update type	Frequency of updates	Typical update size	Default setting	Appliance restart required?	Description
Database	About twice per week	About 15 MB	Automatically check for updates hourly	No	Definitions of known malware
Database	Multiple times daily	Less than 1 MB	Automatically check for updates hourly	No	Antivirus and content filter
Software	 Minor releases (w.x.y.z): About once per month Major releases (x.y and x.y.z): About two to four times per year 	About 40 MB	Automatically check for updates daily; by default at 3:30 A.M.	Yes, for some updates	Fixes for software issues and new features

Table 7-3	Database and	software	updates
	Dutubuse una	Solution	apaaces

You can configure the update check frequency, enable notification of new software updates, and read software update release notes on the **Administration > Updates** page. If you enable automatic updates, Symantec Web Gateway checks for updates at the frequency you specify. If a new update is available, Symantec Web Gateway immediately downloads and installs the update.

Note: Symantec Web Gateway restarts without warning if you configure automatic software updates and the software update requires a restart. The restart occurs shortly after the configured automatic update time. The default automatic update time is 3:30 A.M. If you check for a software update manually and the update requires a restart, Symantec Web Gateway notifies you that a restart is required. You can choose to install the software update immediately or at a later time.

You may need to disable automatic software updates to conform to administrative procedures at your site. In that case, Symantec recommends that you specify an email address to receive notifications about new software updates. Symantec recommends that you enable automatic database updates to ensure that your network is protected from the latest malware threats.

About alerts

You can configure Symantec Web Gateway to send the following types of alerts:

Malware alerts	Alerts for malware attacks and malware infections
System alerts	Alerts for software and hardware events and issues on the Symantec Web Gatewayappliance.
	Examples of alerts are as follows:
	 By the hardware bypass being activated or deactivated When disk space is running low When the system starts up When the CPU temperature is high When a power supply has models with redundant power supplies only When a hard drive is corrupt (models with RAID arrays only) When the network is not configured properly (Redundant power and RAID are not available on all models)
CIU alerts	Alerts for when CIU's managed appliance has system problem and when it loses connection for a specific period of time

You can send alerts to one or more of the following destinations:

- One or more email addresses
- A remote syslog server
- SNMP Network Management System as SNMP trap

Symantec Web Gateway can send email alerts in CSV format or HTML format.

You must configure a remote syslog or SNMP Network Management System to send alerts to those systems. Consult the documentation for those systems for configuration information. You must also configure Symantec Web Gateway to send alerts to a remote syslog or SNMP Network Management System.

See "About sending alerts to syslog" on page 150.

See "About monitoring Symantec Web Gateway using SNMP" on page 150.

About sending alerts to syslog

Symantec Web Gateway can send malware alerts and system alerts to a remote syslog server. You cannot store syslog data on the Symantec Web Gateway appliance. Consult your syslog documentation for configuration information. Specify the syslog server and facility on the **Administration > Configuration > Syslog** page.

See "About alerts" on page 149.

About monitoring Symantec Web Gateway using SNMP

Simple Network Management Protocol (SNMP) is a standard protocol for network monitoring. You can use SNMP to monitor Symantec Web Gateway.

See "About alerts" on page 149.

Symantec Web Gateway supports SNMP version v2 and version v3. Symantec provides Symantec Web Gateway MIB files to import into your Network Management System. These MIB files define what monitoring information Symantec Web Gateway provides the Network Management System. The following Symantec Web Gateway information is available by SNMP:

- Appliance model number
- Appliance serial number
- Software version number
- Database version number
- CPU utilization
- Appliance temperature in Celsius

- Hard disk usage
- Operating status
- License status
- Operating mode
- Cumulative raw traffic processed expressed in bytes

Note: On your Network Management System, set the query timeout for polling to Symantec Web Gateway to five seconds or more.

Consult your SNMP documentation for configuration information. Specify the SNMP information and download MIB files on the **Administration > Configuration > SNMP** page. You can configure Symantec Web Gateway to send malware alerts or system alerts as SNMP traps. Symantec Web Gateway sends alerts as SNMP traps in real time. Alerts indicate changes and minor to serious issues on Symantec Web Gateway.

Symantec Web Gateway does not support management by SNMP. You cannot use a Network Management System to make changes to a Symantec Web Gateway appliance. Instead, you can use a Central Intelligence Unit to make changes to one or more Symantec Web Gateway appliances.

See "About centralized management using a Central Intelligence Unit" on page 195.

About backing up and restoring the Symantec Web Gateway configuration

You can back up the Symantec Web Gateway configuration to a file on your local computer. If you need to reinstall Symantec Web Gateway on the same appliance, you can restore the configuration. You can also restore the configuration to a different, compatible appliance. For example, when you upgrade to a new Symantec Web Gateway appliance, you can back up the old model and restore the configuration to the new model. As a best practice, you should include backing up Symantec Web Gateway as part of your network backup scheme.

You can make a backup from one type of Symantec Web Gateway model and restore it on the same model or on a different but compatible model.

See "Cross-model backup and restore compatibility" on page 152.

See "Creating a manual backup" on page 154.

See "Creating a scheduled backup" on page 155.

See "Restoring backups" on page 156.

Cross-model backup and restore compatibility

Table 7-4 describes the cross-model backup and restore compatibility of various Symantec Web Gateway models. **Yes** means that the backup capabilities and restore capabilities are supported between the source model and destination model. **No** indicates that they are not supported. The rows in this table indicate the model of the backup. The columns indicate the models onto which you can restore the backup. For example, you can restore backups from an 8450 model to an 8450 model, but you cannot restore backups from an 8450 model to an 8490 model.

Backup from model	Restore to model 8450	Restore to model 8490	Restore to model 005	Restore to model 007	Restore to model 009	Restore to Virtual
8450	Yes	No	Yes	No	No	Yes
8490	Yes	Yes	Yes	Yes	Yes	Yes
007	No	No	No	Yes	No	No
009	No	No	No	No	Yes	No
Virtual	Yes	No	Yes	No	No	Yes

Table 7-4Cross-model backup and restore compatibility

Similarly, you can make a backup from a Central Intelligence Unit and restore it on the same Central Intelligence Unit. Or you can restore it on a different Central Intelligence Unit different but compatible Central Intelligence Unit.

Note: You cannot restore a backup from a managed appliance to a Central Intelligence Unit. Similarly, you cannot restore a backup from a Central Intelligence Unit to a managed appliance.

Backup file contents

When you use the Web GUI to create a backup, the backup data is stored in a file on your local computer. To store a file on a remote computer, schedule a backup.

See "About backing up and restoring the Symantec Web Gateway configuration" on page 151.

Symantec Web Gateway saves the backup file with the current date and time in the following format:

backup_day_month_year_hour_minute_second_DeviceName.des3

For example, Symantec Web Gateway saves a backup on October 17 , 2009 at 11:10:15 P.M. as:

backup 17 10 2009 11 10 15 WEBGATE2.des3

The hour in the backup name follows the 24-hour format.

You can rename the backup file. Renaming the backup file does not affect the restore process. Do not attempt to edit the backup file.

 Table 7-5 lists the configuration information that is and is not included in the backup file.

Included configuration information	Omitted configuration information
The following configuration information is saved when you back up Symantec Web Gateway:	The following configuration information is not saved when you back up Symantec Web Gateway:
 Symantec Web Gateway administrative users Saved reports Blacklist and Whitelist policies Alert settings Network settings Active Directory Integration settings SNMP settings Policy Configuration Web Gateway updates Operating mode Central Management Configuration Servers Email settings Proxy settings Time zone and NTP server settings Module settings Dispatched scan and cleaning configuration Appliance security settings Report settings End user Pages settings 	 Report data System Maintenance All Events Blocking Feedback System Status page

Table 7-5Backup file contents

Creating a manual backup

You should back up Symantec Web Gateway periodically in case of a critical problem with the Symantec Web Gateway software or appliance. When you run a backup, your Web browser prompts you for the location to save the backup file. You can store the backup file on the computer on which your Web browser is running. Alternatively, you can store the backup file to a network location that is accessible from the computer on which your Web browser is running. You cannot store the backup file on Symantec Web Gateway. See "About backing up and restoring the Symantec Web Gateway configuration" on page 151.

See "Backup file contents" on page 152.

As a best practice, every time you back up Symantec Web Gateway, save the backup files in the same location.

To create a manual backup

- **1** In the Web GUI, click **Administration > Configuration > Maintenance**.
- 2 Beside Backup Current Settings to File, click Backup.
- **3** In the Web browser in the **Save** file dialog box, save the file to an appropriate location.

Creating a scheduled backup

In addition to creating a manual backup from the Web GUI page, you can set up a scheduled backup to occur at regular intervals. For example, you can schedule a backup to occur once, weekly, or monthly. Symantec Web Gateway saves the scheduled backup file to the FTP directory that you specify.

See "About backing up and restoring the Symantec Web Gateway configuration" on page 151.

See "Backup file contents" on page 152.

To create a scheduled backup

- 1 In the Web GUI, click Administration > Configuration > Maintenance.
- 2 Beside Scheduled Backup Current Settings to File, click Scheduled Backup.

If there is no scheduled backup, the following message appears:

You have no backups scheduled.

3 To create a scheduled backup, click **New Schedule**.

The Save and Schedule Backup page appears.

4 On the Save and Schedule Backup page, specify the following information.

Backup Frequency	Beside Backup Frequency , select one of the following options:
	 Save Only Select this option if you want to save the current backup settings for future use. Once Select this option if you want to back up the configuration once at a time. Daily, Weekly, Monthly Select the backup frequency and set the date and time that the backup should occur.
Enable Email	Check Enable email to send a report of the backup status to the email addresses that you specify. The email report does not include the backup data.
Email Address(es)	Type the recipient email address. Separate multiple email address with commas.
File Transfer Protocol	Transmit the backup by FTP, SFTP, or FTPS. Specify a file path on the remote computer, computer address, and account information.
FTP server IP or Hostname	Type the FTP server IP address or host name.
FTP Username	Type the FTP user name.
FTP Password	Type the FTP password.
FTP Directory	Type the FTP directory to store the backup files. The FTP directory refers the directory relative to the base directory of the FTP user.

5 Click **Save** to create a new schedule.

Restoring backups

If you have made backups of Symantec Web Gateway, you can restore an appliance in case of a critical problem with the Symantec Web Gateway software or appliance. You can restore a backup file of the same version or a later version than the version that runs on the appliance. For example, if an appliance runs version 5.0, you can restore a backup of version 5.0 or 5.1. But you cannot restore a backup from version 4.5. You can restore from a manual backup file or scheduled backup file.

See "Cross-model backup and restore compatibility" on page 152.

The IP address may optionally be restored. For example, if the backup file was created on a different appliance, you do not want to have both appliances use the same IP address.

See "Backup file contents" on page 152.

See "About backing up and restoring the Symantec Web Gateway configuration" on page 151.

When you upload a custom certificate, it is encrypted with an appliance identification and a secret key that is specific to that appliance. When you backup Symantec Web Gateway, the backup file contains this encrypted data. If you restore the backup on a different appliance, Symantec Web Gateway is not able to read the encrypted data because the appliance identification is different. Therefore, you must upload the custom certificate on the new appliance after you restore the backup.

To restore backups

1 In the Web GUI, click Administration > Configuration > Maintenance.

If you cannot access the Web GUI, reset access to the setup wizard using the Serial Console and run the setup wizard again.

See "Running the setup wizard after initial installation" on page 63.

See "Running the setup wizard" on page 46.

- 2 Next to **Restore Settings From File**, click **Browse**.
- 3 In the dialog box, browse to the backup file and click **Open**.
- 4 Click Restore.
- 5 Click one or more of the following options on the **Restore Option** page:

Network, Operating mode, Proxy	Check Network, operating mode and proxy configuration to restore from the backup file.	
	Uncheck Network, operating mode and proxy	
	configuration not to restore from the backup file and	
	retain the original configuration.	

Central Management	Check Central Management to restore the Central Management configuration tab from the backup file.
	Uncheck Central Management not to restore from the backup file and include the original configuration.
No options selected	If none of the options are selected, the following configuration settings are restored:
	 Alerts Appliance Name Servers Email Syslog SNMP Authentication LDAP Time Zone Modules Reputation Client Remediation Security Reports Configuration Blacklist End User Page Policy and Service Whitelist Update Restores all of the items on the Update page. Authentication NTLM Authentication Radius Saved Report Scheduled Backup

- 6 Click **Restore** to start the restore process. A restore warning message appears.
- 7 Click **OK** to continue the restore process or click **Cancel** to cancel the restore.

The restore process message appears at the bottom of **Restore Option** page. The appliance restarts after the restoration process successfully completes.

8 Select one of the following options:

ОК	Saves the restored setting with accepted errors.
Cancel	Reverts back to the original settings.
	Reverts back to the original settings if Symantec Web Gateway detects an error during the restoration process.
	When Symantec Web Gateway detects an error, a confirmation dialog lists all of the detected errors. You can determine whether to accept the errors and complete the restoration or revert to the original settings.

9 After the restore is complete, check the settings throughout the Web GUI to ensure that they are appropriate.

Resetting Symantec Web Gateway to factory settings

Occasionally you may need to reset Symantec Web Gateway to the factory settings. For example, if you have an appliance configured as a Symantec Web Gateway, to use that appliance as a Central Intelligence Unit, you must reset the appliance. After you reset an appliance to the factory defaults, you have to run the setup wizard again.

If you create a backup for an appliance, you can restore on the same appliance or different appliance depends upon the matrix from backup file. Restore the appliance from backup file after running the setup wizard.

See "About backing up and restoring the Symantec Web Gateway configuration" on page 151.

Warning: This procedure erases all data from Symantec Web Gateway.

To reset Symantec Web Gateway to factory settings

- **1** In the Web GUI, click **Administration > Configuration > Maintenance**.
- 2 Next to **Restore Default Settings**, click **Restore**.

The appliance restarts. All existing settings are erased. Use the setup wizard to configure the appliance.

See "Running the setup wizard" on page 46.

See "Running the setup wizard for initial installation of a Central Intelligence Unit" on page 198.

Resetting the Web GUI password for the primary system user

If you lost the password for the primary system user, Symantec Web Gateway can email a password to the address that you specified in the setup wizard. If you forgot the primary system user logon name or do not have access to the email address, you must run the setup wizard again.

See "Running the setup wizard after initial installation" on page 63.

To reset the Web GUI password

- **1** Access the Web GUI logon page.
- 2 Click Forgot Password?.

Symantec Web Gateway emails the Web GUI password to the address for the primary system user that you specified in the setup wizard.

Serial Console access to Symantec Web Gateway

You can access Symantec Web Gateway through the Serial Console. The Serial Console can be useful if you cannot access Symantec Web Gateway through the Web GUI. The Serial Console has a character-based, menu-driven interface. Many of the Web GUI settings are available in the Serial Console.

Item	Description
Computer with serial port and monitor	You can use any modern computer and operating system (such as Linux, Mac OS X, and Windows) for this purpose. The computer must have a serial port.
Serial cable (included)	A serial cable is included with Symantec Web Gateway. Connect one end to your computer. Connect the other end to the serial port on the back of the Symantec Web Gateway appliance. To locate the serial port, refer to the diagram for your appliance. See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.

 Table 7-6
 Requirements for Serial Console access to Symantec Web Gateway

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Item	Description
Terminal emulation software	You interact with the Symantec Web Gateway console in terminal emulation software on your computer. On Windows XP, you can use the included HyperTerminal program. HyperTerminal is located at Start > All Programs > Accessories > Communications > HyperTerminal .
	Set the terminal emulation software to the following parameters:
	■ 9600 bits per second
	■ 8 data bits
	■ 1 stop bit
	■ No parity
	■ No flow control
	On Windows, ensure that the terminal emulation software is set to use the correct COM port.
Console logon name and password	By default, the logon name and password for console access is as follows:
	■ Logon name: admin
	Password: admin1 !

Table 7-6Requirements for Serial Console access to Symantec Web Gateway
(continued)

If you connect the cable and properly configure the terminal emulation software, Symantec Web Gateway displays a logon prompt in the terminal emulation software. You can leave the computer attached to the serial port while you run the setup wizard and the Web GUI. 162 | Administering Symantec Web Gateway Serial Console access to Symantec Web Gateway

Chapter

Reports

This chapter includes the following topics:

- About reports
- Exporting a report to a .csv file
- Scheduling automatic reports
- Monitoring user browse time

About reports

Symantec Web Gateway lets you generate reports to monitor the following:

- Most accessed Web sites
- Most active users
- Spyware-infected computers
- Most common malware
- Network attacks
- Infection sources

You can click linked statistics on the reports to get more information about that user, computer, Web site, category, and so on.

If you have configured Active Directory integration, Symantec Web Gateway displays some report statistics by Active Directory user name. If you have not configured Active Directory integration, Symantec Web Gateway displays those report statistics by host name or IP address instead.

See "About Active Directory integration" on page 171.

Reports	Description
Executive Summary	Lists the summary spyware incident statistics for your network.
	The report includes traffic processed, spyware trends, sources of spyware infections, and infected computers.
Enterprise Summary	Summarizes the activity that Symantec Web Gateway detected organized by host name.
Enterprise Summary (Browse Time)	Lists the time that users spend Web browsing.
	Located on the Enterprise Summary report. You must enable the browse time recording to activate this report.
	See "Enabling URL filtering, Internet program monitoring, and other features" on page 58.
Custom Reports	Lets you create your own reports based on the time period and various event statistics.
	You can run full queries of report log data.
Infected Clients	Lists all the computers that malware has infected.
Infections by Spyware Name	Lists all the malware infections that Symantec Web Gateway detected in your site. The report includes the number of infected computers, and number of times these infections have attempted to contact master Web sites. The report also shows how many infections have occurred for each malware name, and the category and severity of each infection.

Table 8-1Overview of reports

Reports	Description
Potential Attacks	Lists all potential attacks. The following potential attack reports are available:
	 Spyware The Spyware report lists the attempts by remote systems to access an infected computer or send a malicious network element such as a worm. IP Scanning The IP Scanning report lists the IP addresses that attempted to scan IP address at your site. Spamming The Spamming report lists the IP address that attempted to send spam within your site.
Infection Sources	Lists all the monitored or blocked URLs, spyware Web sites, and spyware file downloads attempted by users at your site.
	It also lists the number of computers and the number of times these accesses were attempted.
Client Applications	Lists the usage details of various applications and protocols at your site.
	This report also lists the number of computers and number of times the network transmissions of these applications were detected.
Web Destinations	Lists all attempts to contact the monitored or blocked Web sites by users at your site.
	This report also lists the number of computers and the number of times that users attempted to access the Web destinations.
Botnets	Lists the detected activity that may indicate a botnet.

Table 8-1Overview of reports (continued)

Reports	Description	
File Uploads	Lists the files that have been uploaded from your site. The report lists the uploaded files by type.	
Saved Reports	Lists the reports that you saved.	
Alerts	Lists the alerts that Symantec Web Gateway generates when it detects infections or when certain system events occur.	
	Alerts are triggered based on the infection count, severity, or based on the IP address or host name of the infected PC.	
Search by Hostname	Lists the reports by specifying the Host name of the computers available in the Active Directory network.	
Search by User Name	Displays the report statistics by Active Directory user name.	
Search by Department	Lets you search reports by department as configured in the Active Directory.	
	You can also verify that your department is configured in the Organization directory or not.	
Search by IP Location	Lets you search reports by IP address, and it lists the geographical location or country of origination of the host computer in the network.	

Table 8-1Overview of reports (continued)

Exporting a report to a .csv file

You can export a report to a comma-separated values (.csv) file. You can import the .csv file into a database program or spreadsheet program like Microsoft Excel that can import .csv files.

If you export the **Executive Summary** report, the .csv file contains report data for the five reports that are displayed in the **Executive Summary** report. All other reports contain one type of report data specific to that report.

To export a report to a CSV file

- 1 In the Web GUI, click the report that you want to export.
- 2 In the upper right part of the page, click **Report Options** and then click one of the following:

Export Page	Exports only the data that is visible on the current Web GUI page.
Export All	Exports all the data available for the report.

3 In the dialog box that the Web browser appears, save the file.

Scheduling automatic reports

Symantec Web Gateway can deliver reports at set intervals to email addresses, a remote computer by file transfer, or both. Symantec Web Gateway emails reports as .csv or .html files. When you configure an automatic report, the report is saved on the **Reports > Saved Reports** page.

To schedule automatic reports

- 1 In the Web GUI, click the report that you want to run automatically.
- 2 In the upper right part of the page, click **Report Options** and then click **Save** and **Schedule**.
- **3** Type a **Report Name** and **Report Description**.

The **Report Name** is displayed in the **Reports > Saved Reports** page and the report that is emailed or saved to the remote computer. **Report Name** and **Report Description** appear if you edit a saved report.

4 Next to **Selected Data** click one of the following:

Include the first <i>number</i> entries.	Delivers the number of entries that you specify from the report. The most recent entries appear.
Include all entries.	Delivers all the data available for the report.

5 Next to **Report Frequency**, click one of the following:

Save Only	Do not schedule the report for delivery. Instead, save the report to the Reports > Saved Reports page for later use.
Once	Schedule the report to be delivered once at the date and time that you specify. The report is still saved to the Reports > Saved Reports page for later use.
 15 minutes 30 minutes Hourly Daily Weekly Monthly 	Schedule the report to be delivered at the interval that you specify. The 15 minute, 30 minute, and hourly reports are delivered starting on the hour. For example, Symantec Web Gateway delivers the 30-minute report at :00 and :30 of the hour. Symantec Web Gateway prompts you for when to deliver the daily, weekly, and monthly reports.

6 Next to **Type of Delivery**, check one or both of the following check boxes:

Email

Delivers the report to one or more email addresses in HTML or CSV format. The recipients receive a static version of the report in an email message that includes a link to the live report. To see the live report, the recipient must have network access and logon privileges to the Symantec Web Gateway.

If you select this option, specify the following information:

Email Address(es)

Type a valid email address. You must separate multiple email addresses with a comma or a line break.

Email Format

Check the format that you want to use. You can only select one option. File TransferDelivers the report by FTP, SFTP, or FTPS.

For file transfers, you must also specify the following information:

FTP Filename

Type a file path on the remote computer.

Symantec Web Gateway adds a timestamp suffix to the file path. Do not specify a computer address that starts with a URI such as: ftp://

- FTP Server IP or Hostname
 Type the server IP address or host name.
- FTP Username

Check **Anonymous** if you want to use anonymous FTP.

- FTP Password Type the FTP password.
- **FTP Directory** Type the FTP directory.

7 Click Save.

Monitoring user browse time

Symantec Web Gateway can record the approximate amount of time that each computer or user spends in the Web browser. You must configure Active Directory integration to display the browse time by user. Otherwise, Symantec Web Gateway displays the browse time by computer.

See "About Active Directory integration" on page 171.

To ensure that your browse time report truly reflects meaningful user browse times, you can specify a minimum threshold and inactivity threshold. For example, you can set a threshold to omit from the report instances in which a user browses the Web less than 5 minutes. You can also omit from the report instances in which a user is inactive in the Web browser more than 3 minutes.

Table 8-2 describes how you can configure the threshold and sensitivity todetermine how Symantec Web Gateway records browse time.

170 | Reports Monitoring user browse time

Browse time threshold and sensitivity

Example	Browsing behavior	Result
Example 1 with threshold at 5 minutes and sensitivity at 3 minutes	 At 9:00 A.M., the user accesses www.symantec.com. At 9:07 A.M., the user clicks a link in www.symantec.com. The user does not use the Web browser for 30 minutes. 	The total browse time that is recorded is 0 minutes. The 3-minute sensitivity that is applied starting at 9:00 and 9:07 is still less than the 5-minute threshold . Since those browse times are not continuous, 0 minutes is recorded.
Example 2 with threshold at 5 minutes and sensitivity at 3 minutes	 At 9:00 A.M., the user accesses www.symantec.com. At 9:02 A.M., the user clicks a link in www.symantec.com. At 9:04 A.M., the user clicks a link in www.symantec.com. At 9:06 A.M., the user clicks a link in www.symantec.com. The user does not use the Web browser for 30 minutes. 	The total browse time that is recorded is 6 minutes. Between 9:00 and 9:06 is counted as 6 minutes.

You can review user browse time reports on the **Reports > Enterprise Summary > Browse Time** page.

See "Exporting a report to a .csv file" on page 166.

To monitor user browse time

- 1 In the Web GUI, click Administration > Configuration > Modules.
- 2 Under Browse Time Report Configuration, check Record browse time.
- **3** In the **Threshold** field, type the threshold.

User browse times that are less than the threshold do not appear in the browse time report.

The default value is 5 minutes

4 In the **Sensitivity** field, specify the sensitivity.

When a user is inactive more than the minutes that you specify, Symantec Web Gateway omits this time from the browse time report.

The default value is 3 minutes.

Chapter

Configuring Active Directory integration

This chapter includes the following topics:

- About Active Directory integration
- Active Directory compatibility with Symantec Web Gateway
- Comparison of Active Directory integration with a domain controller and NTLM
- Configuring Active Directory integration by using DCInterface
- Configuring Active Directory integration with NTLM
- Refreshing Active Directory user data in reports

About Active Directory integration

You can configure Symantec Web Gateway to integrate with Microsoft Active Directory through LDAP. Active Directory is a Microsoft product that stores user account information and provides authentication on Windows networks.

The integration with Active Directory provides the following benefits:

- User names are displayed in reports.
- You can create policies based on Active Directory user names, workgroups, and group categories.

See "Active Directory compatibility with Symantec Web Gateway" on page 172.

You can use a Central Intelligence Unit to configure the Active Directory Integration on managed appliances. You can also configure each Symantec Web Gateway directly. You can configure Symantec Web Gateway to obtain user login information through NTLM authentication or by installing Symantec's Domain Controller Interface software (DCInterface) on an Active Directory server.

See "Comparison of Active Directory integration with a domain controller and NTLM" on page 172.

See "Configuring Active Directory integration by using DCInterface" on page 175.

See "Configuring Active Directory integration with NTLM" on page 182.

See "Refreshing Active Directory user data in reports" on page 194.

Active Directory compatibility with Symantec Web Gateway

Table 9-1 lists the versions of Microsoft Windows with which Symantec WebGateway can interface.

Windows version	Physical installation	Virtual installation
Windows 2003	Yes	Yes, VMware
Windows 2008	Yes	Yes, VMware

 Table 9-1
 Supported Active Directory versions

Global catalogs are supported for both methods of Active Directory integration available for Symantec Web Gateway:

- Symantec Domain Controller Interface
- NTLM

The global catalog server is only required in a multi-domain forest deployment.

See "About Active Directory integration" on page 171.

Comparison of Active Directory integration with a domain controller and NTLM

You can configure Active Directory integration with Symantec's Domain Controller Interface software (DCInterface) or by using NTLM. The method appropriate for your environment depends on the number of users at your site and other considerations. **Note:** Do not attempt to configure Active Directory integration with both DCInterface and NTLM. The policies do not work correctly if you configure both DCInterface and NTLM.

See "About Active Directory integration" on page 171.

Table 9-2 describes the differences between DCInterface and NTLM.

Consideration	Domain Controller Interface	NTLM
User identification method	The Symantec Domain Controller Interface sends user name to Symantec Web Gateway .	Symantec Web Gateway queries user Web browser for authentication.
User attribute queries	The appliance queries Active Directory using the OpenLDAP protocol.	The appliance queries Active Directory using the OpenLDAP protocol.
Scalability	There are no scalability issues.	Supports any number of users in Active Directory, assuming that the environment is scaled appropriately.
Affect on network load and Symantec Web Gateway load	Potentially significant load due to real-time authentication.	Minimal if the 15-minute default polling interval is retained. If the setting is 0, then NTLM authenticates continuously.
Configuration changes required outside of Symantec Web Gateway	You must install Symantec Domain Controller Interface software on each domain Controller Interface that users log on to.	No additional software installation is required but a change to your DNS configuration may be necessary.
Change required to user computers	None.	Changes to the user Web browser may be necessary.

Table 9-2Comparing Active Directory integration with a Symantec Domain
Controller Interface and NTLM

174 | Configuring Active Directory integration Comparison of Active Directory integration with a domain controller and NTLM

Consideration	Domain Controller Interface	NTLM
User experience	Transparent to users. No special logon for Symantec Web Gateway is required.	Usually transparent to users who run Internet Explorer on Microsoft Windows if you check the Use Interface Name for NTLM Authentication checkbox on the Administration > Configuration > Authentication tab. In some cases Outlook or the Web browser displays a dialog box that requires users to log on. Firefox displays the authentication window in all cases. For 407 authentication, the authentication window does not appear if the domain user logs in. See "Ensuring compatibility with NTLMv1 and NTLMv2" on page 188.
Speed of recognition for reporting purposes	Users are identified immediately upon logon.	For inline traffic, user identification occurs by polling. A delay occurs between the time that users logon and the time that Symantec Web Gateway registers the logon. The default polling frequency is 15 minutes but you can configure the frequency. For proxy traffic, users are identified immediately upon login.

Table 9-2	Comparing Active Directory integration with a Symantec Domain
	Controller Interface and NTLM (continued)

Configuring Active Directory integration by using DCInterface

Table 9-3 describes the steps to configure Active Directory integration by using DCInterface.

Step	Action	Description
Step 1	Create an Active Directory account.	Create a read-only Active Directory account for Symantec Web Gateway. Configure the account to have access to the full Active Directory catalog.
Step 2	Specify your Active Directory settings.	Specify your Active Directory settings in the Symantec Web Gateway Web GUI. See "Configuring Active Directory integration" on page 176.
Step 3	Install the Symantec Domain Controller Interface.	Download the Symantec Domain Controller Interface from the Symantec Web Gateway Web GUI and install it. See "Installing the Symantec Domain Controller Interface software" on page 178.
Step 4	Configure the Symantec Domain Controller Interface.	Edit a text file to configure the Symantec Domain Controller Interface. See "Configuring the Symantec Domain Controller Interface" on page 180.
Step 5 (Optional)	Remote domain controller access only: specify the Active Directory user account.	If you did not install the Symantec Domain Controller Interface directly on the domain controller, you must specify the Active Directory user account in Services.
		See "Configuring the Symantec Domain Controller Interface for remote Active Directory access" on page 180.

 Table 9-3
 Steps to configure Active Directory integration by using DCInterface

	(continued)	
Step	Action	Description
Step 6	Start the Symantec Domain Controller Interface service.	Start the Symantec Domain Controller Interface in Services.
		See "Starting the Symantec Domain Controller Interface" on page 181.
Step 7	Test the Active Directory integration.	If the Active Directory integration works correctly, user names display in the Symantec Web Gateway Web GUI reports when you create at least one policy of any type.

Table 0.3 Steps to configure Active Directory integration by using DCInterface

Configuring Active Directory integration

You specify your Active Directory configuration in the Symantec Web Gateway Web GUI for both domain controller authentication and NTLM authentication. Ensure that you created an Active Directory account for use by Symantec Web Gateway before you configure domain controller authentication in the Symantec Web Gateway Web GUI. Configure the account to have access to the full Active Directory catalog.

To configure Active Directory integration

- 1 In the Web GUI, click Administration > Configuration > Authentication.
- 2 Check Use LDAP to identify end users.
- 3 Under LDAP Configuration, specify the following information about your Active Directory environment:

LDAP Server IP or Hostname	Type the IP address or host name of the Active Directory server.
LDAP Port	Type the communication port number for the Active Directory server. Port 389 is the default port by Microsoft convention.

Authentication Method	 Click one of the following options: Simple The user name (bind DN) and password are transmitted in plain text. Kerberos The user name (bind DN) and password are encrypted using the encrypted Kerberos protocol.
LDAP Search Base (Base DN)	Type the base DN for authentication queries to your Active Directory. A typical base DN for a simple Active Directory configuration is dc=domain, dc=com where domain is the domain name of your company. You may need to add additional parameters to the base DN, such as the organizational unit (ou=department).
User Name	Type the user name (bind DN) that you created for use by Symantec Web Gateway. Type the user name using one of the following forms:
	 sAMAccountName, for example: john_smith Valid for simple and Kerberos authentication. sAMAccountName@domain, for example: john_smith@symantecdomain.com Valid for simple and Kerberos authentication. Distinguished name (DN), for example: cn=john smith, dc=symantecdomain, dc=com Or CN=John Smith, OU=accounting, OU=finance, DC=symantecdomain, DC=com Valid for simple but not Kerberos authentication.
Password	Type the password for the user account.
Group Users by	 Click one of the following grouping options: Department Organizational unit
UID Attribute	 Click one of the following UID attributes: sAMAccountName uid This attribute form is no longer supported. Other If you select Other, specify the UID.

Sync Frequency	The number of hours that Symantec Web Gateway
	considers a user's Active Directory attributes (such as
	workgroup association, email address, phone number)
	valid. After this period, a user's Active Directory
	attributes are considered stale, and Symantec Web
	Gateway automatically refreshes them through an
	LDAP query to the Active Directory.

The default is 168 hours (one week).

4 If you selected Kerberos as the authentication method, click Configure Kerberos settings automatically or manually configure the Kerberos settings. If you click Configure Kerberos settings automatically, Symantec Web Gateway uses the following settings for Kerberos authentication:

LDAP Server IP or Hostname	The data in this field is used for the Kerberos key distribution center (KDC) and administration server.
LDAP Search Base (Base DN)	The data in this field is used for the Kerberos realm and domain.

If those substitutions do not match your Kerberos environment, manually configure Kerberos settings by specifying the following information:

- Kerberos Realm
- Default Domain
- Key distribution center (KDC)
- KDC Port
- Kerberos Admin Server
- Admin Server Port
- **5** Click **Test** for the type of authentication that you want to perform (HTTP 401 or HTTP 407).

The results of the test appear at the top of the page. If there is an error, correct the settings and test again.

6 Click Save.

Installing the Symantec Domain Controller Interface software

For Active Directory integration with a domain controller to work, you must install Symantec Domain Controller Interface.

Install the Symantec Domain Controller Interface on one of the following:

- All domain controllers that users may log on to
- A dedicated Windows computer with access permission to the domain controller log

You must install Symantec Domain Controller Interface software on each domain Controller Interface that users log on to.

Note: The domain controller must run on Windows Server 2008/2003. Symantec Web Gateway supports global catalogs.

If you plan to upgrade an existing Symantec Domain Controller Interface, refer to the README.txt in the .zip file for the recommended procedure. The following procedure is for new installations only.

To install the Symantec Domain Controller Interface

1 In the Web GUI, click Administration > Configuration > Authentication.

If possible, access the Web GUI from the computer on which you plan to install the Symantec Domain Controller Interface.

- 2 Click Download domain Controller Interface software.
- **3** Move the .zip file to a permanent location on the computer on which you plan to install the Symantec Domain Controller Interface and unzip it.

For example, you can put the .zip file in C:\.

- **4** On the computer where you unzipped the .zip file, open a command prompt window.
- **5** In the command prompt window, navigate to the folder where you unzipped the .zip file using the cd command.
- 6 At the command prompt, type the following:

```
DCinterface.exe -install
```

The message Service Does not exist is displayed. You can ignore this message. Do not move the DCinterface.exe file after you run this command.

7 Close the command prompt window.

Next, configure the Symantec Domain Controller Interface.

See "Configuring the Symantec Domain Controller Interface" on page 180.

Configuring the Symantec Domain Controller Interface

After installing the Symantec Domain Controller Interface, you must configure it.

See "Installing the Symantec Domain Controller Interface software" on page 178.

To configure the Symantec Domain Controller Interface

- 1 Use Notepad to open the dcinterface.txt file that was included in the .zip file.
- 2 In the dcinterface.txt file, add a line at the bottom for each Symantec Web Gateway appliance in the following format:

host appliance-name

Type the fully qualified domain name or IP address for the appliance-name.

3 If the Symantec Domain Controller Interface is not installed on the domain controller, add the following line at the bottom of the dcinterface.txt file:

remoteserver domaincontroller-name

Type the fully qualified domain name or IP address for the *domaincontroller-name*.

4 Save and exit from the dcinterface.txt file.

Next, start the service.

See "Starting the Symantec Domain Controller Interface" on page 181.

Configuring the Symantec Domain Controller Interface for remote Active Directory access

Follow this procedure if you installed the Symantec Domain Controller Interface on a computer with access permission to the domain controller log. Do not follow this procedure if you installed the Symantec Domain Controller Interface directly on a domain controller.

The Active Directory user that you specify in this procedure should have domain administrator rights to access the Active Directory log. If that does not work in your Active Directory environment, the Active Directory user may need full administrator rights.
To configure the Symantec Domain Controller Interface for remote Active Directory access

- 1 On the Windows computer that you installed the Symantec Domain Controller Interface on, click **Start > Administrative Tools > Services**.
- 2 Double-click Symantec Domain Controller Interface.
- 3 On the Log on tab, click This account.
- **4** To specify the user name next to **This account**, do one of the following:

To specify a user name in the form DOMAIN\username	Type the user name.
To specify a user name in the form username@domain	Click Browse and type the user name.
To browse for a user name	Click Browse and browse the network for a user name.

Symantec Web Gateway uses the user name to access the Active Directory catalog.

- **5** Type the password for the user name.
- 6 Click OK.

Next, start the service.

Starting the Symantec Domain Controller Interface

After installing and configuring the Symantec Domain Controller Interface, start it in Services. If you installed the Symantec Domain Controller Interface on a computer with access permission to the domain controller log, configure that computer first.

See "Configuring the Symantec Domain Controller Interface for remote Active Directory access" on page 180.

To start the Symantec Domain Controller Interface

- 1 On the Windows computer that you installed the Symantec Domain Controller Interface on, click **Start > Administrative Tools > Services**.
- 2 Click Symantec Domain Controller Interface.
- 3 Click Start the service.

- 4 Close Services.
- **5** To test that it is running, open the Windows Task Manager and look for **Symantec Domain Controller Interface**.

The Symantec Domain Controller Interface writes log information to the errorlog.txt file in the folder where DCinterface.exe resides.

Moving the DCinterface.exe file

After you install the DCinterface.exe file, you should leave it in the same folder. If you need to move the DCinterface.exe file or the folder that it is in, follow these steps. If you move the DCinterface.exe file without following these steps, Active Directory integration can fail to work properly.

To move the DCinterface.exe file

- 1 Click Start > Administrative Tools > Services.
- 2 Click Symantec Domain Controller Interface.
- 3 Click Stop the service.
- 4 Close Services.
- **5** Open a command prompt window.
- **6** Type the following:

```
DCinterface.exe -remove
```

- 7 Move the folder containing DCinterface.exe to the new location.
- 8 In the new location, type the following in a command prompt:

DCinterface.exe -install

9 Open Services again and start Symantec Domain Controller Interface.

Configuring Active Directory integration with NTLM

When you configure Active Directory integration with NTLM, Symantec Web Gateway communicates with user browsers to perform the following tasks:

- Extracts an Active Directory name
- Correlates the user's Active Directory name with the user's IP address
- Reinforces user authentication to the domain controllers when the user's credentials expire

Table 9-4 describes the steps to configure Active Directory integration with NTLM.

Step	Action	Description
Step 1	Specify Management Interface Name in the Web GUI.	To avoid making changes to user Web browsers, specify the Management Interface Name in the Web GUI.
		See "Specifying the Management Interface Name in Symantec Web Gateway" on page 184.
Step 2	Add A record to DNS for each Symantec Web Gateway.	To avoid making changes to user Web browsers, add an A record in DNS for each appliance on which you specified the Management Interface Name .
		See "DNS change needed for NTLM" on page 184.
Step 3	Specify your NTLM settings.	Specify your Active Directory and NTLM settings in the Web GUI.
		See "Configuring Active Directory integration" on page 176.
		See "Configuring Symantec Web Gateway to integrate Active Directory with NTLM" on page 185.
Step 4	If necessary, make Web browser changes.	You may need to make changes to user Web browsers depending on how you configured NTLM and the user Web browser and operating system.
		See "Web browser changes needed for NTLM" on page 187.
Step 5	If necessary, make Outlook, Windows Vista, and Windows 7 or other operating system changes.	You may need to make changes to Outlook, Windows Vista and Windows 7, or other operating systems to ensure compatibility with NTLM.
		See "Ensuring compatibility with NTLMv1 and NTLMv2" on page 188.

Table 9-4Steps to configure Active Directory integration with NTLM

T-1-1-0 4

Table 9-4	(continued)	
Step	Action	Description
Step 6	Test the Active Directory integration with NTLM.	If the Active Directory integration works correctly, user names appear in the Web GUI reports if you have an NTLM authentication policy and a user-based policy. See 5 on page 178.

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Specifying the Management Interface Name in Symantec Web Gateway

To avoid making changes to user Web browsers when you use NTLM authentication, specify the **Management Interface Name** in the Web GUI. You also need to add a record to DNS for this method to work properly.

See "DNS change needed for NTLM" on page 184.

If you manage appliances using a Central Intelligence Unit, you can perform this task for each appliance in the Central Intelligence Unit. However, you must specify the **Management Interface Name** for each appliance individually.

This task does not apply for proxy network configurations.

To specify the Management Interface Name in Symantec Web Gateway

- **1** In the Web GUI, click **Administration > Configuration > Network**.
- 2 Type the Management Interface Name.

The name must be 16 characters or less and must not contain the domain or top-level domain. In other words, the name should be of the form mymibname and not mymibname.symantecs.org.

3 Click Save.

DNS change needed for NTLM

You must add a record in your DNS server for each appliance on which you specified the **Management Interface Name**. Consult the documentation for your DNS server software to determine how to add A records.

Table 9-5 describes the information to specify in your DNS server software. The examples for DNS record type and DNS record class are shown for the BIND DNS server software.

DNS A record component	Description	Example
Name	The Management Interface Name typed as a short form host name without any periods	mymibname
DNS record type	Internet	IN
DNS record class	A record	A
IP address	IP address of the appliance on which you specified the Management Interface Name	192.168.2.100

Table 9-5DNS A record for the Management Interface Name

Configuring Symantec Web Gateway to integrate Active Directory with NTLM

Follow these steps to configure Active Directory integration with NTLM. You may need to change the Web browsers on users' computers.

See "Configuring Active Directory integration with NTLM" on page 182.

See "Web browser changes needed for NTLM" on page 187.

To configure Symantec Web Gateway to integrate Active Directory integration with NTLM

- 1 In the Web GUI, click Administration > Configuration > Authentication.
- **2** Under **NTLM Configuration**, specify the following information about your Active Directory environment:

Default RealmType the domain name of your realm, such as
symantecexample.com. IP addresses are not valid. A
partial domain name is valid if DNS Suffix is specified
on the Administration > Configuration > Network
page.

Primary/Secondary Domain Controller	Type the fully qualified domain name of your primary domain controller and secondary domain controller, such as controller.symantecexample.com . IP addresses are not valid. A partial domain name is valid if DNS Suffix is specified on the Administration > Configuration > Network page. A secondary domain controller is optional if you want a redundant server	
Use Interface Name for NTLM Authentication	 Check the box if you configured a Management Interface Name and added an A record for it to DNS. See "Specifying the Management Interface Name in Symantec Web Gateway" on page 184. Uncheck the box if you do not want to modify DNS. You must modify user browsers. See "Web browser changes needed for NTLM" on page 187. 	
	The default is unchecked but checked (with proper configuration) is recommended.	
Authentication TTL	Type the time between authentication requests from Symantec Web Gateway to the domain controller. The default is 15 minutes. A shorter time results in increased load on Symantec Web Gateway.	
User Authentication Re-tries	Type the number of times that the Web browser allows the user to try to supply the user name and password after failed attempts. If the user fails to correctly log on after this number of attempts, only IP-based policies or default policies apply. If you use an enforce authentication policy, users see an error page. If you use 407 authentication, users see a proxy error page. After the authentication failure, reports display activity based on IP address only and not user names. If you have configured an Enforce Authentication policy for a user and the user fails authentication, Symantec Web Gateway denies Web access. See "Configuring NTLM user authentication behavior"	
	on page 130.	

Use LDAP Credentials for Domain Controller	If you select this option, specify the Domain Controller User Name and the Domain Controller Password in the corresponding boxes. Use the administrator password.
	If you use a proxy network configuration and 407 authentication, Symantec Web Gateway does not save these login credentials. Therefore, an error occurs if you uncheck this box and use different credentials from those that you specify for the Primary and Secondary Domain Controller .

3 Click **Test** beside the type of authentication that you want to perform (HTTP 401 or HTTP 407).

The results of the test appear at the top of the page. If there is an error, correct the settings and test again.

4 Click Save.

Web browser changes needed for NTLM

When you employ Active Directory integration with NTLM, Symantec Web Gateway queries user Web browsers for authentication. In many cases, no special configuration is needed.

Manually making changes to the Web browsers on each user's computer may be a lengthy task. You may be able to distribute changes to Internet Explorer on all user computers using Active Directory tools. Altiris software from Symantec or similar software can also automate configuration changes for user Web browsers.

The Symantec Web Gateway proxy supports basic 401 authentication from Web sites. Web sites that require NTLM 401 authentication or a higher level of 401 authentication are unsupported.

Table 9-6 describes cases in which you must configure user Web browsers.

Scenarios	Change needed in Web browsers
 The following conditions apply: Users access the Internet using a proxy that does not support 401 authentication pass through. The Use Interface Name for NTLM Authentication box is checked. 	Web browsers must be configured to access the Web Gateway interface name directly and not through the proxy. For Internet Explorer, you can make this change centrally using .pac files. The following is a sample .pac file script: function FindProxyForURL(url, hos {
	<pre>if (isPlainHostName(host)) return "DIRECT"; else return "PROXY 192.168.0.70 8080"; }</pre>
The Use Interface Name for NTLM Authentication box is unchecked.	If you do not want to modify DNS, leave Use Interface Name for NTLM Authentication unchecked. Add the IP address of Symantec Web Gateway to the Local Intranet configuration in Internet Explorer. Use the following format: http://num1.num2.num3.num4, such as http://192.168.2.1. You should be able to use Active Directory to push this browser configuration to the users' browsers.
Web browsers other than Microsoft Internet Explorer (for example, Mozilla Firefox, Apple Safari, or Google Chrome).	You may need to make a configuration change in the Web browser to support transparent NTLM authentication. For example, in Firefox add the IP address of each Symantec Web Gateway in your network to network.automatic-ntlm-auth.trusted-uris on the about:config page. See the Web browser documentation for more information.

Table 9-6Web browser changes needed for NTLM

Ensuring compatibility with NTLMv1 and NTLMv2

Some operating systems require configuration changes to work with NTLMv1 or NTLMv2.

If you do not make the necessary changes, you may encounter the following issues:

- Active Directory may deny user access due to failed authentication attempts. This user lockout can occur even if users were not presented with an authentication dialog box due to internal authentication failures.
- Outlook or the Web browser may display a dialog box that requires users to log on.

See "Web browser changes needed for NTLM" on page 187.

See "Configuring NTLM user authentication behavior" on page 130.

Environment	Description	
Microsoft Windows Vista	Windows Vista requires a group policy change to use the NTLMv1 protocol instead of NTLMv2. Windows 7 may require a similar change.	
	See "Configuring NTLMv1 and NTLMv2 compatibility for Windows Vista and Windows 7" on page 189.	
Operating systems that Microsoft does not sell, such as Mac OS X or Linux	Refer to your operating system documentation for information about NTLM integration.	
Windows XP SP2 and Outlook 2003	Users running Outlook 2003 on Windows XP SP2 may see an authentication dialog box.	
	See "Configuring NTLMv1 and NTLMv2 compatibility for Outlook 2003 and Windows XP SP2" on page 190.	
Configuring NTLMv2 compatibility for Windows XP	You should configure NTLMv2 compatibility for Windows XP to use the NTLMv2 session security.	
	See "Configuring NTLMv2 compatibility for Windows XP" on page 191.	

Table 9-7Ensuring compatibility with NTLM

Configuring NTLMv1 and NTLMv2 compatibility for Windows Vista and Windows 7

Windows Vista and Windows 7 requires a group policy change to use the NTLMv1 protocol instead of NTLMv2. Other versions of Windows can also have this issue if your organization's security policy does not support NTLMv1. If you do not make this change, it can affect authentication for users at your site.

See "Ensuring compatibility with NTLMv1 and NTLMv2" on page 188.

For more information, on the Internet go to the following URL and refer to section 10:

support.microsoft.com/kb/823659

You must perform this procedure on every computer that runs Windows Vista and Windows 7 in your network. You can use the Active Directory group policy to make this change for all computers.

To configure NTLM compatibility for Windows Vista and Windows 7

- 1 Click Start > All Programs > Accessories > Run and type secpol.msc in the Open box, and then click OK.
- 2 Click Local Policies > Security Options > Network Security: LAN Manager authentication level.
- 3 Click Send LM & NTLM use NTLMv2 session security if negotiated.
- 4 Click Apply.

Configuring NTLMv1 and NTLMv2 compatibility for Outlook 2003 and Windows XP SP2

In Windows XP SP2, Outlook 2003 email windows other than the preview pane may not pass NTLM credentials transparently. If a user opens a message that contains embedded HTML and the user is not currently authenticated, an authentication dialog box is displayed. To prevent the dialog box, get Windows XP SP3 or a hot fix and modify the registry. These changes must be made to every user computer.

To modify Windows XP to support transparent NTLM authentication with Outlook 2003

- Do one of the following:
 - Request hot fix 895948 from Microsoft.
 - Install Windows XP SP3, which contains hot fix 895948.

To modify the registry to support transparent NTLM authentication with Outlook 2003

- 1 In Windows, click **Start > Run**, type **regedit**, and click **OK**.
- **2** Expand the following subkey:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Internet Explorer\Main\FeatureControl

- 3 Right-click FeatureControl and then click New > Key.
- **4** Type the following and press **Enter**:

KB895948_DISABLE_MAIL_SUBDOWNLOAD_LOCKDOWN

- 5 Right-click **KB895948_DISABLE_MAIL_SUBDOWNLOAD_LOCKDOWN**, and then click **New > DWORD Value**.
- 6 Type outlook.exe and press Enter.
- 7 Right-click **outlook.exe**, and then click **Modify**.
- 8 In the Value data box, type 00000001, and then click OK.
- **9** Exit from registry editor.

Configuring NTLMv2 compatibility for Windows XP

Configuring NTLMv2 compatibility for Windows XP allows your Windows clients to only use NTLMv2 authentication and refuse other security. If you change to this high level of security, it is not easy to connect to other Windows computers without equivalent security settings.

See "Ensuring compatibility with NTLMv1 and NTLMv2" on page 188.

To configure NTLMv2 compatibility for Windows XP

- 1 Click Start > Settings > Control Panel.
- 2 Click the **Performance and Maintenance** category.
- **3** Click **Administrative Tools**.
- 4 Click Local Security Policy > Local Policies > Security Options > Network Security: LAN Manager authentication level.
- 5 Click Send LM& NTLM use NTLMv2 session security if negotiated.
- 6 Click OK.
- 7 Click **Yes** to confirm the change.
- 8 Restart your computer.

Setting up the ignore authentication in NTLM v2 client

Before you use NTLM v2 client to configure the ignore authentication, you should set up the following initial configuration in Symantec Web Gateway.

To set up the ignore authentication in NTLM v2 client

- **1** To enable the HTTPS proxy, perform the following tasks:
 - In the Web GUI, click **Administration > Configuration > Proxy**.
 - Check **Enable HTTP/S Proxy**.

- Click Save.
- **2** To enable LDAP and NTLM authentication, perform the following tasks:
 - In the Web GUI, click Administration > Configuration > Authentication.
 - Check Use LDAP to identify end users.
 - Check **NTLM Authentication**.
 - Click Save.
- **3** To enable user authentication, perform the following tasks:
 - In the Web GUI, click **Policies > Configuration**.
 - Click Create a New Policy.
 - Type the policy name.
 - Check the User Authentication.
 - Select **Enforce Authentication** from the list.
 - Click Save.

See "Ignoring authentication when you use the NTLM v2 client to configure the whitelist" on page 192.

Ignoring authentication when you use the NTLM v2 client to configure the whitelist

You can use NTLM v2 Web browser client to configure Symantec Web Gateway with the inline proxy network configuration or proxy network configuration to ignore authentication of the whitelisted exception Web sites. You should configure your Web browser to access Internet through Symantec Web Gateway proxy and the required proxy settings can be done from a PAC file. The PAC file contains the whitelisted exception Web sites and it can be accessed from your local computer or from your remote computer.

See "Sample proxy auto-configuration (PAC) file" on page 193.

To ignore authentication when you use the NTLM v2 client to configure the whitelist

- 1 In the Web GUI, click **Policies > Whitelist**.
- 2 Click Add a Whitelist Entry.
- 3 In the Hostname/IP or IP/mask field, type the host name.
- 4 Check Whitelist and Ignore Authentication.
- 5 Click Save.

6 Configure your Web browser that uses the PAC file and access the Internet through Symantec Web Gateway proxy.

For more information on how to configure proxy using Internet Explorer and Mozilla Firefox browser, refer the browser documentation.

The PAC file contains the following list of whitelisted exception Web sites:

- windowsupdate.microsoft.com
- update.microsoft.com
- c.microsoft.com
- download.windowsupdate.com
- www.update.microsoft.com
- download.microsoft.com
- crl.microsoft.com
- 7 From the Web browser client, access the whitelisted Web site.

The whitelisted exception Web site appears, and the NTLM authentication pop-up does not appear.

See "Setting up the ignore authentication in NTLM v2 client" on page 191.

Sample proxy auto-configuration (PAC) file

Use a proxy auto-configuration (PAC) file to selectively drive HTTP traffic through either the inline bridge or the HTTP/S proxy path of the Symantec Web Gateway.

When you configure Internet Explorer to use a PAC file, it caches the proxy server information for each host on a host-by-host basis regardless of whether you use HTTP or HTTPS. The result is that some Web sites may be temporarily inaccessible when you switch between HTTP and HTTPS.

To resolve this issue, disable automatic proxy caching in the registry file or group policy settings.

For more information, on the Internet, go to the following URL:

http://support.microsoft.com/kb/271361

The following is sample content for a PAC file:

```
function FindProxyForURL(url, host)
{
    // variable strings to return
    var proxy_yes = "PROXY 10.130.16.60:8082";
    var proxy no = "DIRECT";
```

```
if (shExpMatch(url, "http://finance.yahoo.com*")) { return proxy_no; }
if (shExpMatch(url, "http://news.yahoo.com*")) { return proxy_no; }
if (shExpMatch(url, "http://www.google.com*")) { return proxy_no; }
if (shExpMatch(url, "http://video.google.com*")) { return proxy_no; }
if (shExpMatch(url, "http://zh-cn.facebook.com*")) { return proxy_no; }
if (shExpMatch(url, "http://10.130.16.150/*")) { return proxy_no; }
// Proxy anything else
return proxy_yes;
```

See "Ignoring authentication when you use the NTLM v2 client to configure the whitelist" on page 192.

Refreshing Active Directory user data in reports

You can refresh individual user information from LDAP to display the latest information from LDAP in user reports. By default, the synchronization frequency between Symantec Web Gateway and LDAP is 168 hours. After every 168 hours, Symantec Web Gateway synchronizes with LDAP for the updated user information.

To refresh Active Directory user data in reports

- 1 In the Web GUI, click **Custom Reports**.
- 2 In the **Custom Reports**, check for the data availability and for valid LDAP user name.
- 3 In the Login Name or Fullname column, click the user.

The report for the selected user name appears.

4 Click Refresh.

The report for the selected user refreshes and displays the latest information.

See "About Active Directory integration" on page 171.

Chapter

Configuring a Central Intelligence Unit to manage multiple appliances

This chapter includes the following topics:

- About centralized management using a Central Intelligence Unit
- Installing a Central Intelligence Unit
- Running the setup wizard for initial installation of a Central Intelligence Unit
- Connecting a Central Intelligence Unit to the network
- Configuring appliances to accept management by a Central Intelligence Unit

About centralized management using a Central Intelligence Unit

Any Symantec Web Gateway appliance can be configured to manage one or more other Symantec Web Gateway appliances. An appliance that is configured to manage other appliances is called a Central Intelligence Unit. On the Central Intelligence Unit, most Web GUI pages let you make changes or view reports for all managed appliances or individual managed appliances.

Note: You can only deploy one Central Intelligence Unit to manage a group of appliances. You cannot configure a Central Intelligence Unit to act as a failover appliance to another Central Intelligence Unit.

You can continue to log on to the Web GUI of managed appliances after you configure a Central Intelligence Unit. Managed appliances can be configured in any operating mode other than Central Intelligence Unit. When you configure an appliance as a Central Intelligence Unit, that appliance cannot function as a Symantec Web Gateway.

See "Installing a Central Intelligence Unit" on page 196.

Feature	Description
Centralized management	Make the same change to multiple appliances at the same time or make unique changes to individual appliances from the Central Intelligence Unit
Centralized reporting	View consolidated reports from all managed appliances

 Table 10-1
 Central Intelligence features

Table 10-2 describes the frequency of data exchange between a Central Intelligence Unit and managed appliances.

Table 10-2Data exchange between Central Intelligence Unit and managed appliances				
Direction	Type of data	Port	Protocol	Frequency
Central Intelligence Unit to managed appliances	Configuration data	443	SSL	After you click Save on a Web GUI page on the Central Intelligence Unit
Managed appliances to Central Intelligence	Statistics for reports	443	SSL	By default, every five minutes when there is new data or modified data on the managed appliance See "Configuring appliances to accept management by a Central Intelligence Unit" on page 201.

Installing a Central Intelligence Unit

Table 10-3 describes the steps to install a Central Intelligence Unit.

Note: If you want to use an appliance that was previously configured as a Web Gateway, you must reset it to the factory settings.

See "Resetting Symantec Web Gateway to factory settings" on page 159.

Table 10-3	Steps to install a	a Central Intelligence Unit
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Step	Action	Description	
Step 1	Install and configure appliances for the Central Intelligence Unit to manage.	Install and configure the appliances that you plan to have the Central Intelligence Unit manage. Ensure that each appliance functions independently before configuring it as a managed appliance.	
		Alternatively, you can run the setup wizard on the managed appliances and immediately configure them to accept management by the Central Intelligence Unit. After that you can configure each appliance using the Central Intelligence Unit.	
		See "Installing Symantec Web Gateway" on page 44.	
Step 2	Install the Central Intelligence Unit into a rack.	Install the Central Intelligence Unit into a rack, but wait to connect Ethernet cables.	
		See "Installing the Symantec Web Gateway appliance into a rack" on page 45.	
Step 3	Connect a computer for initial installation.	Configure and connect a computer to the Central Intelligence Unit for initial installation.	
		See "Configuring a computer to access Symantec Web Gateway for installation" on page 45.	
Step 4	Run the setup wizard.	Run the setup wizard for the Central Intelligence Unit.	
		See "Running the setup wizard for initial installation of a Central Intelligence Unit" on page 198.	
Step 5	Connect the Central	Connect the Central Intelligence Unit to the network.	
	Intelligence Unit to the network.	See "Connecting a Central Intelligence Unit to the network" on page 201.	
Step 6Review the network ports that Symantec Web Gateway		Open ports between Central Intelligence Unit and managed appliances.	
	uses.	See "Ports and settings that Symantec Web Gateway uses" on page 35.	

Step	Action	Description
Step 7	Configure managed appliances.	Configure managed appliances to accept management by the Central Intelligence Unit.
		See "Configuring appliances to accept management by a Central Intelligence Unit" on page 201.

Table 10-3Steps to install a Central Intelligence Unit (continued)

See "About centralized management using a Central Intelligence Unit" on page 195.

Running the setup wizard for initial installation of a Central Intelligence Unit

After you physically install Symantec Web Gateway and connect a computer to the management port, you can run the setup wizard. This procedure describes how to configure an appliance as a Central Intelligence Unit.

See "Installing a Central Intelligence Unit" on page 196.

Note: For the Central Intelligence Unit to communicate with managed appliances, the Central Intelligence Unit and managed appliances must be running the same software version. For example, if the Central Intelligence Unit runs 5.0, then all managed appliances must run 5.0 also. You must also synchronize the time between Symantec Web Gateway and the Central Intelligence Unit.

To run the setup wizard for initial installation of a Central Intelligence Unit

1 Press the power button on the front of the Symantec Web Gateway appliance.

The appliance takes several minutes to start.

2 On the computer that is connected to the management port, start a Web browser and go to the following URL:

http://192.168.254.254

- 3 On the Welcome panel, click Next.
- 4 On the **License Agreement** panel, read the license agreement, check the box, and click **Accept**.
- 5 On the **Install License** panel, do the following tasks:
 - In the **Company Name** box, type the name of your organization.
 - Click **Browse** and locate your license file.

■ Click Next.

If you do not install a license now, there is a two week grace period. During this time the product runs as if the Symantec Web Gateway license were installed.

6 On the Select Server Type panel, click Central Intelligence Unit.

You can only change the server type in the setup wizard, not in the Web GUI after completing the setup wizard.

7 On the **User Information** panel, specify the following information about the primary Web GUI administrator:

Login Name	Type a login name for the primary Web GUI administrator. Use ASCII characters only. The login name is case sensitive.
Password	Type a password for the primary Web GUI administrator.
Reenter password	Type the password again to verify its accuracy.
Description	Optionally, you can type a description for the current user account. This description is displayed on the Edit User page.
Email Address	Type an email address. Type a complete email address, such as admin@symantecs.org. Symantec Web Gateway sends alerts and reports to this email address. If you click the Forgot Password? link on the logon page, a new password is sent to this address.

- 8 Click Next.
- **9** On the **Server Information** panel, specify the following information:

Name

Type a descriptive name for Symantec Web Gateway with ASCII characters. The server name can include spaces. The server name is not used for network access to Symantec Web Gateway. It appears in reports and alerts. If you use a Central Intelligence Unit to manage multiple Symantec Web Gateway appliances, this name identifies each Symantec Web Gateway appliance.

Network Settings	Specify the following network settings for Symantec Web Gateway:
	Automatic (DHCP) or Manual
	Automatic (DHCP) is not recommended.
	■ IP address
	Subnet Mask
	Default Gateway
	Primary DNS
	Secondary DNS (Optional)
	 DNS Suffix (Optional)
	You can specify a DNS suffix so that you can type the short form of other host names in the Central Intelligence Unit Web GUI.
Central Management Settings	Specify the following network settings for Symantec Web Gateway:
	Local Management Address
	 The network address that managed appliances use to connect to the Central Intelligence Unit. Normally you specify the same address for the IP address in Network Settings and the Local Management Address. If you change this address after you run the setup wizard, the new address is propagated to all managed appliances. Management Password
	The password that managed appliances use to authenticate to the Central Intelligence Unit.
Proxy settings	The following proxy settings may be desired if you have a proxy in your network:
	 Use proxy for Central Intelligence Unit secure communication (SSL) with Symantec Threat Center Analyze ports used by proxy
m !	
11me zone	Unit is installed.

- 10 Click Finish.
- **11** The appliance restarts.

Additional configuration is necessary for Symantec Web Gateway to function properly.

See "Post-installation tasks" on page 50.

Connecting a Central Intelligence Unit to the network

Connect a Central Intelligence Unit to a part of the network where the managed appliances can reach the Central Intelligence Unit. The managed appliances access the Central Intelligence Unit using the **Local Management Address** that you specified in the setup wizard for the Central Intelligence Unit.

To connect a Central Intelligence Unit to the network

 Connect a straight-through (not crossover) Ethernet cable from the management port of the Central Intelligence Unit to a LAN switch port.

Do not connect the Monitor, LAN, or WAN ports on the Central Intelligence Unit to the network.

See "Connections, ports, and indicators on the Symantec Web Gateway appliance" on page 41.

Configuring appliances to accept management by a Central Intelligence Unit

Each Symantec Web Gateway appliance that you want to manage with a Central Intelligence Unit must be configured to accept management. You can still log on to the Web GUI of the managed appliances if necessary.

See "Installing a Central Intelligence Unit" on page 196.

If the setup wizard has not been run on the appliance, complete that procedure before this procedure.

See "Installing Symantec Web Gateway" on page 44.

Note: For the Central Intelligence Unit to communicate with managed appliances, the Central Intelligence Unit and managed appliances must be running the same software version. For example, if the Central Intelligence Unit is running version5.0, then all managed appliances must be running version 5.0 also. You must also synchronize the time between Symantec Web Gateway and the Central Intelligence Unit.

To configure appliances to accept management by a Central Intelligence Unit

- **1** In the Web GUI of an appliance that you want a Central Intelligence Unit to manage, click **Administration > Configuration > Central Mgmt**.
- 2 Click Enable Central Management.
- **3** In **Local Management Address**, type the address for the Central Intelligence Unit to contact this Web Gateway.

You can type an IP address or host name that the Central Intelligence Unit can resolve. Normally the address you specify for the **Local Management Address** is the same address that you specified for this appliance in the setup wizard. If the managed appliance is separated from the Central Intelligence Unit by a NAT server, specify an address that the Central Intelligence Unit can resolve.

- **4** In the **Management Password** field, type the management password that you specified on the Central Intelligence Unit.
- **5** In the **Upload Frequency** field, type the frequency in minutes that the appliance uploads events to the Central Intelligence Unit.

A lower number results in more current data in the Central Intelligence Unit but also places load on the appliance and the Central Intelligence Unit. The default upload frequency is 5 minutes. The recommended upload frequency is also 5 minutes.

- 6 Click Add a Central Manager.
- 7 Type the host name or IP address of the Central Intelligence Unit.

If the managed appliance is separated from the Central Intelligence Unit by a NAT server, specify an address that the managed appliance can resolve. Specify a fully qualified domain name if you did not specify the **DNS Suffix** on the **Administration > Configuration > Network** page.

8 Click Save.

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