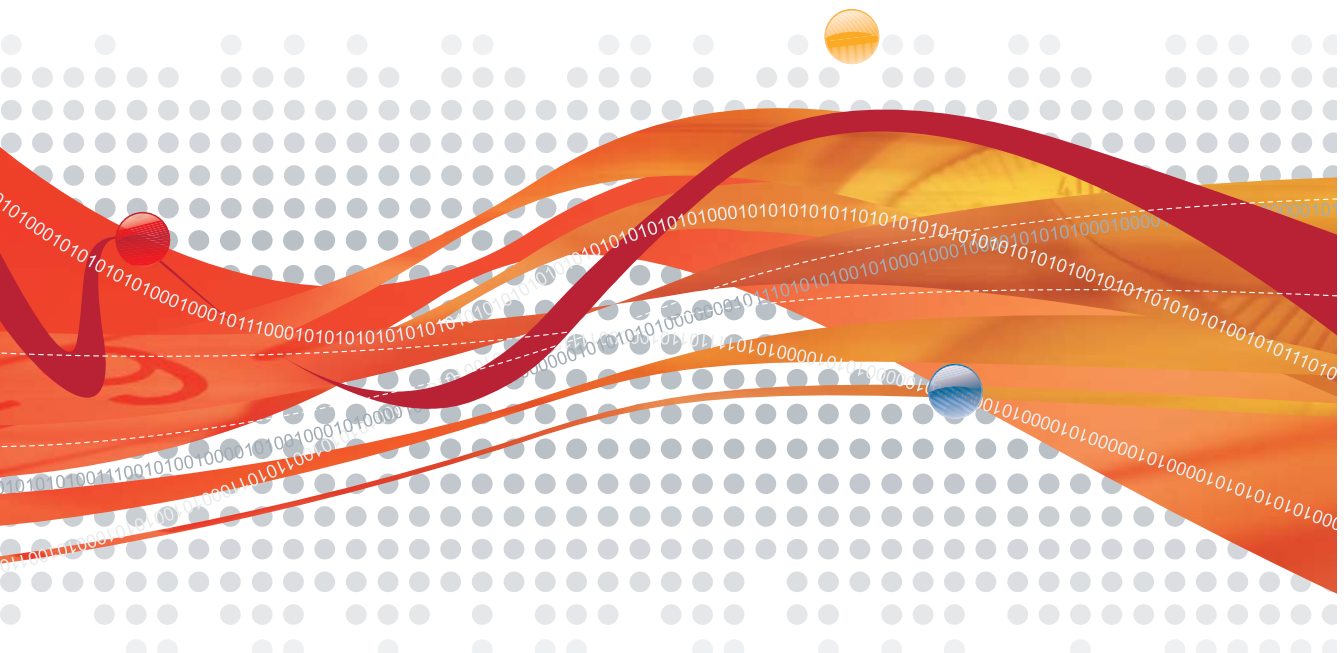




# Worry-Free™ Business Security5

for Small and Medium Business



**Administrator's Guide**



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<http://www.trendmicro.com/download>

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Protected by U.S. Patent Nos. 5,951,698 and 7,188,369

The user documentation for Trend Micro™ Worry-Free™ Business Security Administrator's Guide is intended to introduce the main features of the software and installation instructions for your production environment. You should read through it prior to installing or using the software.

Detailed information about how to use specific features within the software are available in the online help file and the Knowledge Base at Trend Micro Web site.

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# Preface

Welcome to the Trend Micro™ Worry-Free™ Business Security 5.1 Administrator's Guide. This book contains information about the tasks needed to install and configure Worry-Free Business Security.

The topics discussed in this chapter include:

- *Audience* on page xii
- *Product Documentation* on page xii
- *Document Conventions and Terms* on page xv

## Audience

This book is intended for novice and experienced Administrators of Worry-Free Business Security (WFBS) who want to configure, administer, and use the product.

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**Note:** This document helps you get started using Worry-Free Business Security. If you are using Worry-Free Business Security, the parts of this document that describe Messaging Security Agents do not apply to your product.

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## Product Documentation

The Worry-Free Business Security documentation consists of the following:

- Online Help

Web-based documentation accessible from the Web console.

The Worry-Free Business Security *Online Help* describes the product features and gives instructions on their use. It contains detailed information about customizing your settings and running security tasks. Click the icon to open context-sensitive help.

*Who should use the online help?*

WFBS Administrators who need help with a particular screen.

- Getting Started Guide

The *Getting Started Guide* provides instructions to install/upgrade the product and get started. It provides a description of the basic features and default settings of Worry-Free Business Security.

The *Getting Started Guide* is accessible from the Trend Micro SMB CD or can be downloaded from the Trend Micro Update Center:

<http://www.trendmicro.com/download>

*Who should read this guide?*

WFBS Administrators who want to install and get started with Worry-Free Business Security.

- Administrator's Guide

The *Administrator's Guide* provides a comprehensive guide for configuring and maintaining the product.

The *Administrator's Guide* is accessible from the Trend Micro SMB CD or can be downloaded from the Trend Micro Update Center:

<http://www.trendmicro.com/download>

*Who should read this guide?*

WFBS Administrators who need to customize, maintain, or use Worry-Free Business Security.

- Readme file

The *Readme file* contains late-breaking product information that is not found in the online or printed documentation. Topics include a description of new features, installation tips, known issues, license information, and so on.

- Knowledge Base

The *Knowledge Base* is an online database of problem-solving and troubleshooting information. It provides the latest information about known product issues. To access the Knowledge Base, go to the following Web site:

<http://esupport.trendmicro.com>

Trend Micro is always seeking to improve its documentation. For questions, comments, or suggestions about this or any Trend Micro documents, please contact us at docs@trendmicro.com. Your feedback is always welcome. You can also evaluate this documentation on the following site:

[www.trendmicro.com/download/documentation/rating.asp](http://www.trendmicro.com/download/documentation/rating.asp)

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**Note:** This guide assumes that you are using the Worry-Free Business Security version of the product. If you are using the Worry-Free Business Security Advanced version, the information in this guide is applicable, but you will not be able to use the features that belong to Messaging Security Agent.

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## What Information Can I Find in the Administrator's Guide?

This document can be separated into four main sections consisting of installation planning, product and component installation, post installation configuration, and finding help.

- **Chapters 1 and 2:** These chapters provide an overview of the key features and capabilities of Worry-Free Business Security.
- **Chapter 3:** This chapter explains the steps necessary for installing or upgrading Agents. It also provides information on removing the Agent.
- **Chapter 4:** This chapter explains the concept and usage of groups in Worry-Free Business Security.
- **Chapters 5:** This chapter explains the steps necessary for configuring groups.
- **Chapter 6:** This chapter explains the Outbreak Defense Strategy, how to configure Outbreak Defense, and how to use it to protect networks and Clients.
- **Chapter 7:** This chapter describes how to use Manual and Scheduled scans to protect your network and Clients from virus/malware and other threats.
- **Chapter 8:** This chapter explains how to use and configure Manual and Scheduled Updates.
- **Chapter 9:** This chapter describes how to use logs and reports to monitor your system and analyze your protection.
- **Chapter 10:** This chapter explains how to use the different notification options.
- **Chapter 11:** This chapter explains how to use Global Settings.
- **Chapter 12:** This chapter explains how to use additional administrative tasks such as viewing the product license, working with the Plug-in Manager, and uninstalling the Security Server.
- **Chapter 13:** This chapter explains how to use the Administrative and Client tools that come with Worry-Free Business Security.
- **Chapter 14:** This chapter provides answers to commonly asked questions about installation and deployment, describes how to troubleshoot problems that may arise with Worry-Free Business Security, and provides information you will need to contact Trend Micro technical support.
- **Appendices:** These chapters include system check lists and the exclusion list for spyware/grayware, provide information on the various Trend Micro Services,

information about the Client, the different types of spyware/grayware, and a Glossary.

## Document Conventions and Terms

To help you locate and interpret information easily, the WFBS documentation uses the following conventions.

**TABLE P-1. Conventions and terms used in the document**

| CONVENTION/TERM        | DESCRIPTION  |
|------------------------|--|
| UPPER CASE             | Acronyms, abbreviations, and names of certain commands and keys on the keyboard  |
| <b>Bold</b>            | Menus and menu commands, command buttons, tabs, options, and tasks   |
| <i>Italics</i>         | References to other documentation  |
| Monospace              | Sample command lines, program code, Web URL, file name, and program output   |
| <b>Note:</b>           | Configuration notes  |
| <b>Tip</b>             | Recommendations  |
| <b>WARNING!</b>        | Critical actions and configuration options   |
| <b>Navigation Path</b> | The navigation path to reach a particular screen. For example, <b>Scans &gt; Manual Scans</b> , means, click <b>Scans</b> , and then click <b>Manual Scans</b> on the interface. |
| Security Server        | The Security Server hosts the Web console, the centralized Web-based management console for the entire Worry-Free Business Security solution.                                    |
| Web console            | The Web console is a centralized, Web-based, management console that manages all the Agents. The Web console resides on the Security Server.                                     |
| Agent/CSA              | The Client/Server Security Agent. Agents protect the Client it is installed on.  |
| Clients                | Clients are desktops, portable computers, and servers where a Client/Server Security Agent is installed.   |



# Introducing Worry-Free Business Security

This chapter provides an overview of Worry-Free Business Security's key features and capabilities.

The topics discussed in this chapter include:

- *Overview of Worry-Free Business Security* on page 1-2
- *What's New in This Release?* on page 1-2
- *What's Included in Worry-Free Business Security* on page 1-5
- *Understanding Threats* on page 1-12
- *How Worry-Free Business Security Protects Your Computers and Network* on page 1-16
- *What Else Can Worry-Free Business Security Do?* on page 1-20
- *Updateable Components* on page 1-26

## Overview of Worry-Free Business Security

Trend Micro™ Worry-Free™ Business Security (WFBS) protects your business and its reputation against data theft and risky Web sites. Our safer, smarter, simpler security blocks Web-based threats and other malware to protect your business assets and customer information.

Only Trend Micro offers Web threat protection that addresses the exponential growth of Web threats with constant updates that will not slow your PCs down. Our knowledge base rapidly deploys to defend all our customers like a global neighborhood watch. Worry-Free Business Security protects Microsoft™ Windows™ servers, PCs, and portable computers.

## What's New in This Release?

### What's New in Version 5.1

This version of Worry-Free Business Security brings a host of benefits to businesses that lack dedicated resources for antivirus management. Version 5.1 inherits all the features of previous versions and provides the following new features:

#### **Support for Windows™ Small Business Server 2008**

Version 5.1 supports Windows Small Business Server (SBS) 2008, allowing users to handle built-in security components in SBS 2008 and avoid conflicts. Version 5.1 handles SBS 2008 security features as follows:

- The Security Server installer does not disable or remove Microsoft Windows Live™ OneCare for Server; however, the installer for the Client/Server Security Agent (CSA) removes OneCare from client computers.

Version 5.1 also provides an add-in to the SBS console that allows administrators to view live security and system information.

#### **Support for Windows™ Essential Business Server (EBS) 2008**

Version 5.1 supports Windows Essential Business Server 2008, allowing users to install applicable Worry-Free Business Security components on computers handling

the server roles that are supported by EBS 2008. Version 5.1 allows EBS 2008 administrators to:

- Install the Security Server on computers handling any server role.
- View live security and system information on the EBS console using the provided add-in.

## Enhanced Security Engines

Version 5.1 includes the following new engines:

- Web Threat Protection (originally called "Web Reputation Services") engine with enhanced feedback mechanism supporting the Trend Micro Smart Protection Network for faster discovery and handling of unknown Web threats
- Scan engine with reduced memory footprint and other performance enhancements
- Behavior monitoring engine that provides threat deactivation, intelligent handling of dynamic ActiveX installations, and other features and enhancements

## Additional Scan Information on the Security Groups Tree

Administrators can now see the date and time of the last manual and scheduled scans for the selected desktop or server group in the Security Groups tree.

## What's New in Version 5.0

The following features were added in version 5.0:

### Security Server

- **Location Awareness:** Worry-Free Business Security can identify the location of a Client based on Server Gateway information. Administrators can have different security settings based on the location of the Client (roaming or within the office).
- **Threat Status:** View Web Threat Protection and Behavior Monitoring statistics on the Live Status screen.
- **Plug-in Manager:** Add/remove plug-ins for Agents.
- **User Interface:** Security Server now comes with a new and improved user interface.

## Client/Server Security Agent

- **Windows Vista Support:** Client/Server Security Agents can now be installed on Windows Vista (32-bit and 64-bit) computers. Refer to *32-bit and 64-bit Clients* on page D-3 for a comparison of the CSA features on different platforms.
- **Behavior Monitoring:** Behavior Monitoring protects Clients from unauthorized changes to the operating system, registry entries, other software, or files and folders.
- **Web Threat Protection:** Web Threat Protection (originally "Web Reputation Services") evaluates the potential security risk of each requested URL by querying the Trend Micro Security database at the time of each HTTP request.
- **Instant Message Content Filtering:** Instant Message Content Filtering can restrict the use of certain words or phrases while using instant messaging applications.
- **Software Protection:** With Software Protection, a user can restrict the applications that modify contents of folders on his/her computer.
- **POP3 Mail Scan:** POP3 Mail Scan protects Clients against security risks and spam transmitted through email messages.

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**Note:** POP3 Mail Scan cannot detect security risks and spam in IMAP messages.

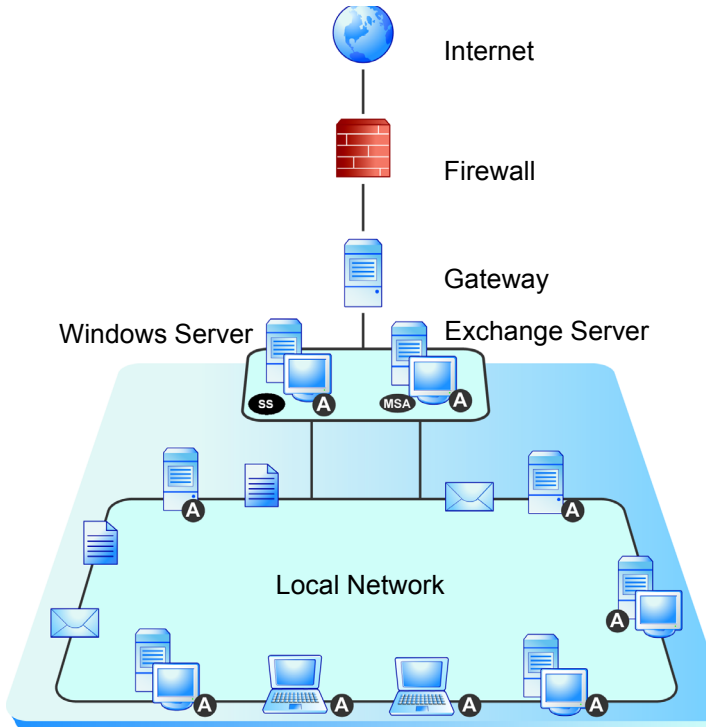
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- **TrendSecure™:** TrendSecure comprises a set of browser-based tools (TrendProtect and Transaction Protector) that enable users to surf the Web securely. TrendProtect warns users about malicious and Phishing Web sites. Transaction Protector determines the safety of your wireless connection by checking the authenticity of the access point.
- **Intuit™ Protection:** Protect all your QuickBooks files and folders from unauthorized changes by other programs.
- **Plug-in Manager Support:** Manage additional plug-ins for Client/Server Security Agent from the Security Server.
- **User Interface:** Client/Server Security Agent now comes with a new and improved user interface.

## What's Included in Worry-Free Business Security

- Web console manages all Agents from a single location.
- Security Server, which hosts the Web console, downloads updates from the Trend Micro ActiveUpdate Server, collects and stores logs, and helps control virus/malware outbreaks.

- Client/Server Security Agent, which protects Windows Vista/2000/XP/Server 2003/Server 2008 computers from virus/malware, spyware/grayware, Trojans, and other threats.



**FIGURE 1-1. Worry-Free Business Security protects desktops and servers**

**TABLE 1-1. Legend**

| Symbol | Description  |
|--------|--|
| A      | Client/Server Security Agent installed on Clients  |
| MSA    | Messaging Security Agent installed on an Exchange server (only available in Worry-Free Business Security Advanced) |
| SS     | Security Server installed on a Windows server  |

## Web Console

The Web console is a centralized, Web-based, management console. Use the Web console to configure Agents. The Web console is installed when you install the Trend Micro Security Server and uses Internet technologies such as ActiveX, CGI, HTML, and HTTP/HTTPS.

Also use the Web console to:

- Deploy the Agents to servers, desktops, and portable computers.
- Combine desktops and portable computers and servers into logical groups for simultaneous configuration and management.
- Set antivirus and anti-spyware scan configurations and start Manual Scan on a single group or on multiple groups.
- Receive notifications and view log reports for virus/malware activities.
- Receive notifications and send outbreak alerts through email messages, SNMP Trap, or Windows Event Log when threats are detected on Clients.
- Control outbreaks by configuring and enabling Outbreak Prevention.

## Security Server

At the center of Worry-Free Business Security is the Security Server (indicated by **SS** in Figure 1-1). The Security Server hosts the Web console, the centralized Web-based management console for Worry-Free Business Security. The Security Server installs Agents to Clients on the network and along with the Agents, forms a client-server relationship. The Security Server enables viewing security status information, viewing Agents, configuring system security, and downloading components from a centralized location. The Security Server also contains the database where it stores logs of detected Internet threats being reported to it by the Security Agents.

The Trend Micro Security Server performs these important functions:

- Installs, monitors, and manages Agents on the network
- Downloads virus pattern files, spyware pattern files, scan engines, and program updates from the Trend Micro update server, and then distributes them to Agents

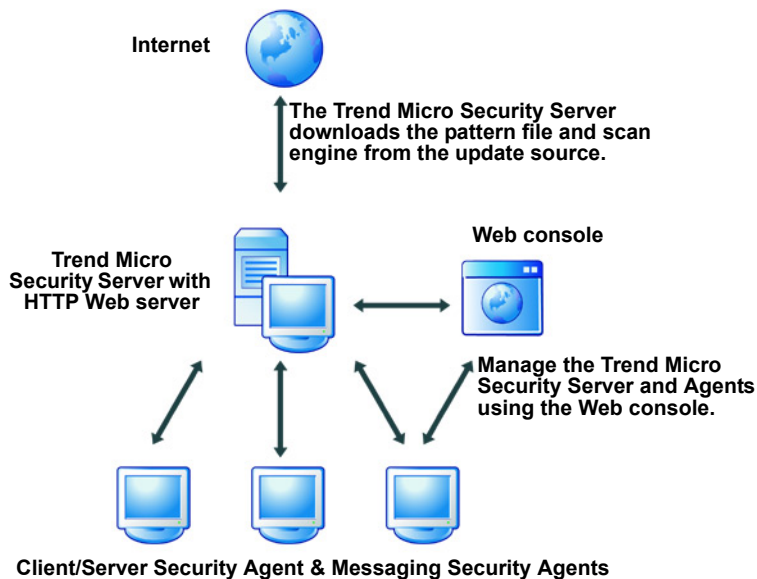


FIGURE 1-2. How Client/Server communication through HTTP works

## Client/Server Security Agent

The Client/Server Security Agent (indicated by **A** in Figure 1-1) reports to the Trend Micro Security Server from which it was installed. To provide the server with the very latest Client information, the Agent sends event status information in real time. Agents report events such as threat detection, Agent startup, Agent shutdown, start of a scan, and completion of an update.

The Client/Server Security Agent provides three methods of scanning: Real-time Scan, Scheduled Scan, Manual Scan.

Configure scan settings on Agents from the Web console. To enforce uniform desktop protection across the network, choose not to grant users privileges to modify the scan settings or to remove the Agent.

## Scan Engine

At the heart of all Trend Micro products lies a scan engine. Originally developed in response to early file-based computer virus/malware, the scan engine today is exceptionally sophisticated and capable of detecting Internet worms, mass mailers, Trojan horse threats, phishing sites, and network exploits as well as virus/malware. The scan engine detects two types of threats:

- **Actively circulating:** Threats that are actively circulating on the Internet
- **Known and controlled:** Controlled virus/malware not in circulation, but that are developed and used for research

Rather than scan every byte of every file, the engine and pattern file work together to identify not only tell-tale characteristics of the virus code, but the precise location within a file where a virus/malware would hide. If Worry-Free Business Security detects a virus/malware, it can remove it and restore the integrity of the file. The scan engine receives incrementally updated pattern files (to reduce bandwidth) from Trend Micro.

The scan engine is able to decrypt all major encryption formats (including MIME and BinHex). It recognizes and scans common compression formats, including ZIP, ARJ, and CAB. Worry-Free Business Security can also scan multiple layers of compression within a file (maximum of six).

It is important that the scan engine remain current with new threats. Trend Micro ensures this in two ways:

- Frequent updates to the virus pattern file
- Upgrades to the engine software prompted by a change in the nature of virus/malware threats, such as a rise in mixed threats like SQL Slammer

The Trend Micro scan engine is certified annually by international computer security organizations, including ICSA (International Computer Security Association).

## Scan Engine Updates

By storing the most time-sensitive virus/malware information in the virus pattern file, Trend Micro is able to minimize the number of scan engine updates while at the same time keeping protection updated. Nevertheless, Trend Micro periodically makes new scan engine versions available. Trend Micro releases new engines under the following circumstances:

- New scanning and detection technologies are incorporated into the software
- A new, potentially harmful virus/malware is discovered
- Scanning performance is enhanced
- Support is added for additional file formats, scripting languages, encoding, and/or compression formats

To view the version number for the most current version of the scan engine, visit the Trend Micro Web site:

<http://www.trendmicro.com>

## Virus Pattern File

The Trend Micro Scan Engine uses an external data file, called the virus pattern file. It contains information that helps Worry-Free Business Security identify the latest virus/malware and other Internet threats such as Trojan horses, mass mailers, worms, and mixed attacks. New virus pattern files are created and released several times a week, and any time a particularly threat is discovered.

All Trend Micro antivirus programs using the ActiveUpdate function can detect the availability of a new virus pattern file on the Trend Micro server. Administrators can schedule the antivirus program to poll the server every week, day, or hour to get the latest file.

---

**Tip:** Trend Micro recommends scheduling automatic updates at least hourly. The default setting for all Trend Micro products is hourly.

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Download virus pattern files from the following Web site (information about the current version, release date, and a list of all the new virus definitions included in the file is available):

<http://www.trendmicro.com/download/pattern.asp>

The scan engine works together with the virus pattern file to perform the first level of detection, using a process called pattern matching.

---

**Note:** Pattern file, scan engine, and database updates are only available to registered users under an active maintenance agreement.

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## Virus Cleanup Engine

WFBS makes use of a scanning and cleanup tool called the Virus Cleanup Engine to find and repair damage caused by virus/malware and other Internet threats. The Virus Cleanup Engine can find and clean virus/malware, Trojans, and other threats. The Virus Cleanup Engine makes use of a database to find targeted machines and evaluate whether threats have affected them. The Virus Cleanup Engine resides on a single machine and deploys to the targeted Client on the network at the time of scanning.

The Virus Cleanup Engine uses the Virus Cleanup Pattern to restore damage caused by the latest known threats. WFBS regularly updates these templates. Trend Micro recommends to update the components immediately after installing and activating WFBS. Trend Micro updates the Virus Cleanup Pattern frequently.

## Common Firewall Driver

The Common Firewall Driver, in conjunction with the user-defined settings of the Firewall, blocks ports during an outbreak. The Common Firewall Driver also uses the Network Virus Pattern file to detect network virus.

## Network Virus Pattern File

The Network Virus Pattern file contains a regularly updated database of packet-level network virus patterns. Trend Micro updates the network virus pattern file frequently, as often as hourly, to ensure Worry-Free Business Security can identify new network virus.

## Vulnerability Pattern File

Worry-Free Business Security deploys the Vulnerability Pattern file after updating components. The Vulnerability Pattern file is used in the **Outbreak Defense > Potential Threat** screen when the Scan for Vulnerability Now tool is used, or when scheduled Vulnerability Assessment is triggered, or whenever a new Vulnerability Pattern file is downloaded. Soon after downloading the new file, Worry-Free Business Security starts scanning Clients for vulnerabilities.

## Understanding Threats

Computer security is a rapidly changing subject. Administrators and information security professionals invent and adopt a variety of terms and phrases to describe potential risks or uninvited incidents to computers and networks. The following is a discussion of these terms and their meanings as used in this document.

### Virus/Malware

A computer virus/malware is a program – a piece of executable code – that has the unique ability to replicate. Virus/malware can attach themselves to just about any type of executable file and are spread as files that are copied and sent from individual to individual.

In addition to replication, some computer virus/malware share another commonality: a damage routine that delivers the virus payload. While some payloads can only display messages or images, some can also destroy files, reformat your hard drive, or cause other damage.

- **Malware:** Malware is software designed to infiltrate or damage a computer system without the owner's informed consent.
- **Trojans:** A Trojan is a malicious program that masquerades as a harmless application. Unlike virus/malware, Trojans do not replicate but can be just as destructive. An application that claims to rid your computer of virus/malware when it actually introduces virus/malware into your computer is an example of a Trojan.
- **Worms:** A computer worm is a self-contained program (or set of programs) that is able to spread functional copies of itself or its segments to other computer systems. The propagation usually takes place through network connections or email

attachments. Unlike virus/malware, worms do not need to attach themselves to host programs.

- **Backdoors:** A backdoor is a method of bypassing normal authentication, securing remote access to a computer, and/or obtaining access to information, while attempting to remain undetected.
- **Rootkit:** A rootkit is a set of programs designed to corrupt the legitimate control of an operating system by its users. Usually, a rootkit will obscure its installation and attempt to prevent its removal through a subversion of standard system security.
- **Macro Viruses:** Macro viruses are application-specific. The viruses reside within files for applications such as Microsoft Word (.doc) and Microsoft Excel (.xls). Therefore, they can be detected in files with extensions common to macro capable applications such as .doc, .xls, and .ppt. Macro viruses travel amongst data files in the application and can eventually infect hundreds of files if undeterred.

Client/Server Security Agents can detect virus/malware during Antivirus scanning. The Trend Micro recommended action for virus/malware is *clean*.

## Spyware/Grayware

Grayware is a program that performs unexpected or unauthorized actions. It is a general term used to refer to spyware, adware, dialers, joke programs, remote access tools, and any other unwelcome files and programs. Depending on its type, it may or may not include replicating and non-replicating malicious code.

- **Spyware:** Spyware is computer software that is installed on a computer without the user's consent or knowledge and collects and transmits personal information.
- **Dialers:** Dialers are necessary to connect to the Internet for non-broadband connections. Malicious dialers are designed to connect through premium-rate numbers instead of directly connecting to your ISP. Providers of these malicious dialers pocket the additional money. Other uses of dialers include transmitting personal information and downloading malicious software.
- **Hacking Tools:** A hacking tool is a program, or a set of programs, designed to assist hacking.
- **Adware:** Adware, or advertising-supported software, is any software package, which automatically plays, displays, or downloads advertising material to a computer after the software is installed on it or while the application is being used.

- **Keyloggers:** A keylogger is computer software that logs all the keystrokes of the user. This information could then be retrieved by a hacker and used for his/her personal use.
- **Bots:** A bot (short for “robot”) is a program that operates as an agent for a user or another program or simulates a human activity. Bots, once executed, can replicate, compress, and distribute copies of themselves. Bots can be used to coordinate an automated attack on networked computers.

Client/Server Security Agents can detect grayware. The Trend Micro recommended action for spyware/grayware is *clean*.

## Network Viruses

A virus spreading over a network is not, strictly speaking, a network virus. Only some of the threats mentioned in this section, such as worms, qualify as network viruses. Specifically, network viruses use network protocols, such as TCP, FTP, UDP, HTTP, and email protocols to replicate.

Firewall works with a network virus pattern file to identify and block network viruses.

## Spam

Spam consists of unsolicited email messages (junk email messages), often of a commercial nature, sent indiscriminately to multiple mailing lists, individuals, or newsgroups. There are two kinds of spam—Unsolicited commercial email messages (UCEs) or unsolicited bulk email messages (UBEs).

## Intrusions

Intrusions refer to entry into a network or a computer either by force or without permission. It could also mean bypassing the security of a network or computer.

## Malicious Behavior

Malicious Behavior refers to unauthorized changes by a software to the operating system, registry entries, other software, or files and folders.

## Fake Access Points

Fake Access Points, also known as Evil Twin is a term for a rogue Wi-Fi access point that appears to be a legitimate one offered on the premises, but actually has been set up by a hacker to eavesdrop on wireless communications.

## Explicit/Restricted Content in IM Applications

Text content that is either explicit or restricted to your organization being transmitted over instant messaging applications. For example, confidential company information.

## Online Keystroke Listeners

An online version of a keylogger. See *Spyware/Grayware* on page 1-13 for more information.

## Packers

Packers are tools to compress executable programs. Compressing an executable makes the code contained in the executable more difficult for traditional Antivirus scanning products to detect. A Packer can conceal a Trojan or worm.

The Trend Micro scan engine can detect packed files and the recommended action for packed files is *quarantine*.

## How Worry-Free Business Security Protects Your Computers and Network

The following table describes how the different components of Worry-Free Business Security protect your network from threats.

**TABLE 1-2. Threats and Worry-Free Business Security Protection**

| Threat  | Worry-Free Business Security Protection  |
|---|--|
| <ul style="list-style-type: none"> <li>• <b>Virus/Malware.</b> Virus, Trojans, Worms, Backdoors, and Rootkits</li> <li>• <b>Spyware/Grayware.</b> Spyware, Dialers, Hacking tools, Password cracking applications, Adware, Joke programs, and Keyloggers</li> </ul> | Antivirus and Anti-spyware Scan Engines along with Pattern Files in Client/Server Security Agent |
| Virus/Malware and Spyware/Grayware transmitted through email messages and spam  | POP3 Mail Scan in Client/Server Security Agent   |
| Network Worms/Viruses   | Firewall in Client/Server Security Agent   |
| Intrusions  | Firewall in Client/Server Security Agent   |
| Conceivably harmful Web sites/Phishing sites  | Web Threat Protection and TrendProtect in Client/Server Security Agent                           |
| Malicious behavior  | Behavior Monitoring in Client/Server Security Agent  |
| Fake access points  | Transaction Protector in Client/Server Security Agent  |
| Explicit/restricted content in IM applications  | IM Content Filtering in Client/Server Security Agent   |

### About Components

Worry-Free Business Security is a multi-tier application that uses the following components to protect your desktops and servers:

#### Antivirus

- **Scan Engine (32-bit/64-bit) for Client/Server Security Agent:** The scan engine uses the virus pattern file to detect virus/malware and other security risks on files that your users are opening and/or saving.

The scan engine works together with the virus pattern file to perform the first level of detection, using a process called pattern matching. Since each virus contains a unique “signature” or string of tell-tale characters that distinguish it from any other code, the virus experts at Trend Micro capture inert snippets of this code in the pattern file. The engine then compares certain parts of each scanned file to patterns in the virus pattern file, searching for a match.

- **Virus Pattern:** A file that helps the Security Agents identify virus signatures, unique patterns of bits and bytes that signal the presence of a virus.
- **Virus Cleanup Template:** Used by the Virus Cleanup Engine, this template helps identify Trojan files and Trojan processes, worms, and spyware/grayware so the engine can eliminate them.
- **Virus Cleanup Engine (32-bit/64-bit):** The engine that Cleanup Services uses to scan for and remove Trojan files and Trojan processes, worms, and spyware/grayware.
- **IntelliTrap Exception Pattern:** The exception pattern used by IntelliTrap and the scan engines to scan for malicious code in compressed files.
- **IntelliTrap Pattern:** The pattern used by IntelliTrap and the scan engines to scan for malicious code in compressed files.

## Anti-spyware

- **Spyware Scan Engine (32-bit):** A separate scan engine that scans for, detects, and removes spyware/grayware from infected computers and servers running on i386 (32-bit) operating systems (Windows Vista, Windows XP, Windows Server 2003, and Windows 2000).
- **Spyware Scan Engine (64-bit):** Similar to the spyware/grayware scan engine for 32-bit systems, this scan engine scans for, detects, and removes spyware on x64 (64-bit) operating systems (Windows Vista x64, Windows XP Professional x64 Edition, Windows 2003 x64 Edition).
- **Spyware Pattern:** Contains known spyware signatures and is used by the spyware scan engines (both 32-bit and 64-bit) to detect spyware/grayware on computers and servers for Manual and Scheduled Scans.
- **Spyware Active-monitoring Pattern:** Similar to the spyware pattern, but is used by the scan engine for real-time anti-spyware scanning.

## Anti-spam

- **Spam engine (32-bit/64-bit):** Detects unsolicited commercial email messages (UCEs) or unsolicited bulk email messages (UBEs), otherwise known as spam.
- **Spam Pattern:** Contains spam definitions to enable the anti-spam engine to detect spam in email messages.

## Outbreak Defense

Outbreak Defense provides early warning of Internet threat and/or other world-wide outbreak conditions. Outbreak Defense automatically responds with preventative measures to keep your computers and network safe; followed by protection measures to identify the problem and repair the damage.

- **Vulnerability Pattern:** A file that includes the database for all vulnerabilities. The vulnerability pattern provides the instructions for the scan engine to scan for known vulnerabilities.

## Firewall

- **Common Firewall Engine (32-bit/64-bit):** The Firewall uses this engine, together with the network virus pattern file, to protect computers from hacker attacks and network viruses.
- **Common Firewall Pattern:** Like the virus pattern file, this file helps Worry-Free Business Security identify network virus signatures.
- **Transport Driver Interface (TDI) (32-bit/64-bit):** The module that redirects network traffic to the scan modules.
- **WFP Driver (32-bit/64-bit):** For Windows Vista Clients, the Firewall uses this driver with the network virus pattern file to scan for network viruses.

## Web Threat Protection

- **Trend Micro Security database:** Web Threat Protection evaluates the potential security risk of the requested Web page before displaying it. Depending on rating returned by the database and the security level configured, Client/Server Security Agent will either block or approve the request.
- **URL Filtering Engine (32-bit/64-bit):** The engine that queries the Trend Micro Security database to evaluate the page.

## TrendProtect

**Trend Micro Security database:** TrendProtect evaluates the potential security risk of the hyperlinks displayed on a Web page. Depending on rating returned by the database and the security level configured on the browser plug-in, the plug-in will rate the link.

## Software Protection

**Software Protection List:** The Software Protection List comprises programs that can modify the contents of files or folders. If a program is not in the list, it cannot create, modify, or delete files or folders.

## Behavior Monitoring

- **Behavior Monitor Core Drivers (32-bit):** This driver detects process behavior on Clients.
- **Behavior Monitor Core Service (32-bit):** CSA uses this services to handle the Behavior Monitor Core Drivers.
- **Policy Enforcement Pattern:** The list of policies configured on the Security Server that must be enforced by Agents.
- **White Listing Pattern:** List of Trend Micro-accepted companies whose software is safe to use.
- **Behavior Monitor Configuration Pattern:** This pattern stores the default Behavior Monitoring Policies.

## Transaction Protector

- **Wi-Fi Advisor:** Checks the safety of wireless networks based on the validity of their SSIDs, authentication methods, and encryption requirements.

## Content Filtering

**Restricted Words/Phrases List:** The Restricted Words/Phrases List comprises words/phrases that cannot be transmitted through instant messaging applications.

## Live Status and Notifications

Live Status gives you an at-a-glance security status for Outbreak Defense, Antivirus, Anti-spyware, and Network Viruses. Similarly, Worry-Free Business Security can send Administrators notifications whenever significant events occur.

## Other Supplementary Trend Micro Products

Worry-Free Business Security offers comprehensive protection for Windows desktops and servers on a local network; however, it does not provide a solution for mail servers, gateway devices and non-Windows operating systems.

To expand your protection, consider combining Worry-Free Business Security with Trend Micro™ InterScan™ VirusWall™ for Small and Medium Business, and/or Trend Micro™ ScanMail™ for Microsoft Exchange.

- InterScan VirusWall is the most comprehensive gateway security software protecting businesses from virus/malware, spyware/grayware, spam, phishing, bots, and inappropriate content, before they can harm your network.
- ScanMail for Microsoft Exchange delivers comprehensive mail server security with antivirus, anti-spam, anti-phishing, content filtering, and new spyware/grayware protection-improving your defense against mixed-threat attacks.

## What Else Can Worry-Free Business Security Do?

With Worry-Free Business Security, Administrators can also:

- *Manage Security From a Single Console* on page 1-21
- *Analyze Network Protection* on page 1-21
- *Enforce Security Policies* on page 1-21
- *Have Updated Protection* on page 1-22
- *Quarantine Infected Files* on page 1-22
- *Control Outbreaks on the Network* on page 1-22
- *Manage Worry-Free Business Security Groups* on page 1-22
- *Protect Clients from Hacker Attacks with Firewall* on page 1-22

- *Protect Email Messages* on page 1-23
- *Filter Instant Messaging Content* on page 1-23
- *Control Security Settings Based on Location* on page 1-23
- *Protect Clients from Visiting Malicious Web Sites* on page 1-24
- *Facilitate Safe Online Transactions* on page 1-25
- *Approved Spyware/Grayware Programs* on page 1-26
- *Secure Communication* on page 1-26

## Manage Security From a Single Console

The Trend Micro Security Server manages the entire antivirus system through a single Web console known as the Web console. Web console is installed along with the Trend Micro Security Server and uses standard Internet technologies such as Java, CGI, HTML, and HTTP.

## Analyze Network Protection

Worry-Free Business Security can generate various types of logs, including virus/malware logs, system event logs, and update logs. Use these logs to verify update deployment, check client-server communication, and determine which computers are vulnerable to infection.

Also use log information as a basis for designing and redesigning network protection, identifying which computers are at a higher risk of infection and changing the antivirus settings accordingly for these computers.

## Enforce Security Policies

Worry-Free Business Security provides three types of scans: Scheduled Scan, Manual Scan, and Real-time Scan. Enforce the organization's security policies by configuring these three types of scans. Specify the types of files to scan and the action to take when Worry-Free Business Security finds a threat.

To apply regulated scan settings to all Agents, choose not to grant privileges to users and lock the Agent with a password to prevent users from altering settings, turning off, or removing protection.

## Have Updated Protection

Virus writers create new virus/malware and release them frequently. To stay protected against the latest threats, Trend Micro releases new virus pattern files frequently. Worry-Free Business Security can automatically download and deploy the pattern files to all the agents.

## Quarantine Infected Files

Specify a quarantine folder to control live virus/malware and infected files. The Trend Micro Security Server then automatically moves infected files to the quarantine folder.

## Control Outbreaks on the Network

Respond immediately to developing outbreaks by enabling Outbreak Defense and setting up outbreak notifications.

Outbreak Defense helps stop outbreaks from overwhelming the network by:

- blocking shared folders and vulnerable ports on Clients
- denying write access to folders

## Manage Worry-Free Business Security Groups

A Group in Worry-Free Business Security is a collection of Clients that share the same configuration and run the same tasks. A Worry-Free Business Security group is different from a Windows domain. There can be several Worry-Free Business Security groups in any given Windows domain.

## Protect Clients from Hacker Attacks with Firewall

Help protect Clients from hacker attacks and network viruses by creating a barrier between the Client and the network. Firewall can block or allow certain types of network traffic. Additionally, Firewall will identify patterns in network packets that may indicate an attack on Clients.

## Protect Email Messages

### POP3 Email Messages

Protects Clients running Windows 2000/XP/Server 2003 from infected Post Office Protocol 3 (POP3) mail messages and attachments and spam. When a threat is detected, the user can choose to delete, clean, or ignore the mail message containing the threat.

## Filter Instant Messaging Content

With IM Content Filtering, Administrators can restrict the usage of certain words transmitted through popular instant messaging applications.

Refer to *IM Content Filtering* on page 11-8 for more details.

## Control Security Settings Based on Location

With Location Awareness, Administrators can control security settings depending on how the Client is connected to the network.

For example, if a person is not in the office, Administrators can set more rigid policies and enable the firewall. But, if the person is at work, the firewall can be disabled.

Client/Server Security Agents can have different profiles depending on their location. WFBS classifies Clients as:

- Normal Clients
- Roaming Clients

### Normal Clients

Normal Clients are computers that are stationary and maintain a continuous network connection with the Security Server.

### Roaming Clients

Roaming Clients are computers that do not always maintain a constant network connection with the Security Server, such as portable computers. These Clients'

Client/Server Security Agents continue to provide virus/malware protection, but have delays in sending their status to the Security Server.

Roaming privileges are normally assigned to Clients that are disconnected from the Security Server for an extended period. When a Client is granted roaming privileges, it can update itself directly from the Trend Micro ActiveUpdate server. Clicking **Update Now** on the Client/Server Security Agent shortcut menu.

Location Awareness controls the In Office/Out of Office connection settings. Refer to *Location Awareness* on page 11-5.

## Behavior Monitoring

Behavior Monitoring constantly monitors the Client for attempts to modify the operating system and other programs. When the Agents detect an attempt, it notifies the user of the change and the user can Allow or Block the request.

Users/administrators can add programs into an exception list. Programs in the exception list can make changes to other programs and the operating system.

Another feature of Behavior Monitoring is to protect EXE and DLL files from being deleted or modified. Users with this privilege can protect specific folders. In addition, users can select to collectively protect all Intuit QuickBooks programs.

## Protect Clients from Visiting Malicious Web Sites

Web Threat Protection enhances protection against visiting malicious Web sites. Web Threat Protection leverages Trend Micro's extensive Web security database to check the reputation of HTTP URLs that users are attempting to access or URLs that are embedded in email messages.

HTTP Web Reputation evaluates the potential security risk of any requested URL by querying the Trend Micro Web security database at the time of each HTTP request. Depending on the security level that has been set, it can block access to Web sites that are known or suspected to be a Web threat or unrated on the reputation database.

Web Threat Protection provides both email notification to the Administrator and online notification to the user for Web Threat Protection detections.

Refer to *Web Threat Protection* on page 5-15 to configure Web Threat Protection.

## Reputation Score

A URL's "reputation score" determines whether a URL is a Web threat or not. Trend Micro calculates the score using proprietary metrics.

- Trend Micro considers a URL "a Web threat", "very likely to be a Web threat", or "likely to be a Web threat" if its score falls within the range set for one of these categories.
- Trend Micro considers a URL safe to access if its score exceeds a defined threshold.

There are three security levels that determine whether Agents will allow or block access to a URL.

- **High:** Blocks URLs that are unrated, a Web threat, very likely to be a Web threat, or likely to be a Web threat.
- **Medium:** Blocks URLs that are unrated, a Web threat, or very likely to be a Web threat.
- **Low:** Blocks only URLs that are a Web threat.

Refer to *Web Threat Protection* on page 11-7 and *Web Threat Protection* on page 5-15 for more information.

## Facilitate Safe Online Transactions

TrendSecure helps safeguard your Internet transactions by determining the safety of your wireless connection and the Web page you are visiting.

TrendSecure adds a browser toolbar that changes color depending on the safety of your wireless connection. You can also click the toolbar button to access the following features:

- **Wi-Fi Advisor:** Checks the safety of wireless networks based on the validity of their SSIDs, authentication methods, and encryption requirements.
- **Page Ratings:** Determines the safety of the hyperlinks on a page (applicable for wireless and wired connections).

Refer to *TrendSecure* on page 5-21 for more information.

## Approved Spyware/Grayware Programs

Certain applications are classified by Trend Micro as spyware/grayware not because they can cause harm to the system on which they are installed, but because they have the potential to expose the Client or the network to malware or hacker attacks.

Hotbar, for example, is a program that embeds a toolbar into Web browsers. Hotbar tracks URLs that users visit and records words or phrases that are entered into search engines. This information is used to display targeted ads, including pop-ups, on users' browsers. Since the information that Hotbar collects can potentially be sent to a third party site and used by malware or hackers to collect information about users, Worry-Free Business Security prevents this application from installing and running by default.

If users require Hotbar or any other application that Worry-Free Business Security classifies as spyware/grayware, add it to the spyware/grayware approved list. Refer to *Editing the Spyware/Grayware Approved List* on page 7-6 for more information.

By preventing potentially risky applications from running and by giving full control over the spyware/grayware approved list, Worry-Free Business Security helps ensure that only approved applications run on Clients.

## Secure Communication

Worry-Free Business Security provides secure communications between the Trend Micro Security Server and the Web console through Secure Socket Layer (SSL) technology.

The Trend Micro Security Server can generate a certificate for each session, allowing the Web console to encrypt data based on Public Key Infrastructure (PKI) cryptography standards. The default period for the certificate is three years.

## Updateable Components

To ensure Worry-Free Business Security uses the latest components to scan for, identify, and clean Clients, Trend Micro updates the following regularly:

- **Components:** Refer to *About Components* on page 1-16 and *Updateable Components* on page 8-3 for more information.

- **Hot fixes and security patches:** Workaround solutions to customer related problems or newly discovered security vulnerabilities that can be downloaded from the Trend Micro Web site and installed to the Trend Micro Security Server and/or Agent

Refer to *About Components* on page 1-16 for information about each component.

## Hot Fixes, Patches, and Service Packs

After an official product release, Trend Micro often develops hot fixes, patches, and service packs to address issues, enhance product performance, or add new features.

The following is a summary of the items Trend Micro may release:

- **Hot fix:** A workaround or solution to a single, customer-reported issue. Hot fixes are issue-specific, and therefore are not released to all customers. Windows hot fixes include a Setup program. Typically, stop the program daemons, copy the file to overwrite its counterpart in the installation, and restart the daemons.
- **Security Patch:** A hot fix focusing on security issues that is suitable for deployment to all customers. Windows security patches include a Setup program.
- **Patch:** A group of hot fixes and security patches that solve multiple program issues. Trend Micro makes patches available on a regular basis. Windows patches include a Setup program.
- **Service Pack:** A consolidation of hot fixes, patches, and feature enhancements significant enough to be a product upgrade. Both Windows and non-Windows service packs include a Setup program and setup script.

Obtain hot fixes from your Technical Account Manager. Check the Trend Micro Knowledge Base to search for released hot fixes:

<http://esupport.trendmicro.com/support>

Check the Trend Micro Web site regularly to download patches and service packs:

<http://www.trendmicro.com/download>

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**Note:** All releases include a readme file with information needed to install, deploy, and configure the product. Read the readme file carefully before installing the hot fix, patch, or service pack files.

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# Working With the Web Console

This chapter tells you how to get up and running with Worry-Free Business Security.

The topics discussed in this chapter include:

- *Exploring the Web Console* starting on page 2-2
- *Using Live Status and Notifications* starting on page 2-6

## Exploring the Web Console

When you install the Trend Micro Security Server, you also install the centralized Web-based management console. The console uses Internet technologies such as ActiveX, CGI, HTML, and HTTP/HTTPS.

### To open the Web console:

1. Select one of the following options to open the Web console:
  - Click the **Worry-Free Business Security** shortcut on the Desktop.
  - From the Windows Start menu, click **Trend Micro Worry-Free Business Security > Worry-Free Business Security**.
  - You can also open the Web console from any computer on the network. Open a Web browser and type the following in the address bar:

```
https://{Security_Server_Name}:{port number}/SMB
```

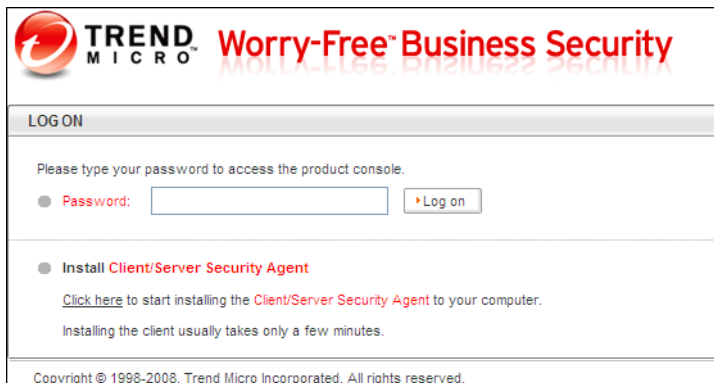
If you are NOT using SSL, type `http` instead of `https`. The default port for HTTP connections is 8059 and for HTTPS connections is 4343.

---

**Tip:** If the environment cannot resolve server names by DNS, replace `{Security_Server_Name}` with `{Server_IP_Address}`.

---

- The browser displays the **Trend Micro Worry-Free Business Security** logon screen.



**TREND MICRO** Worry-Free™ Business Security

LOG ON

Please type your password to access the product console.

● Password:

● Install Client/Server Security Agent

[Click here](#) to start installing the Client/Server Security Agent to your computer.

Installing the client usually takes only a few minutes.

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**FIGURE 2-1. Logon screen of Worry-Free Business Security**

- Type your password in the **Password** text box, and then click **Log on**. The browser displays the **Live Status** screen of the Web console. See *Using Live Status* on page 2-7.

## Web Console Features

The following is a description of the major features of the Web console.

**TABLE 2-1. Web console Main Features**

| Feature                   | Description   |
|---------------------------|---|
| Main menu                 | Along the top of the Web console is the main menu. This menu is always available.   |
| Configuration area        | Below the main menu items is the configuration area. Use this area to select options according to the menu item you selected.   |
| Menu sidebar              | When you choose a Client or group from the <b>Security Settings</b> screen and click <b>Configure</b> , a menu sidebar displays. Use the sidebar to configure security settings and scans for your desktops and servers.  |
| Security Settings toolbar | When you open the <b>Security Settings</b> screen you can see a toolbar containing a number of icons. When you click a Client or group from the <b>Security Settings</b> screen and click an icon on the toolbar, the Security Server performs the associated task. Refer to <i>Security Settings Toolbar</i> on page 4-5 for more information. |

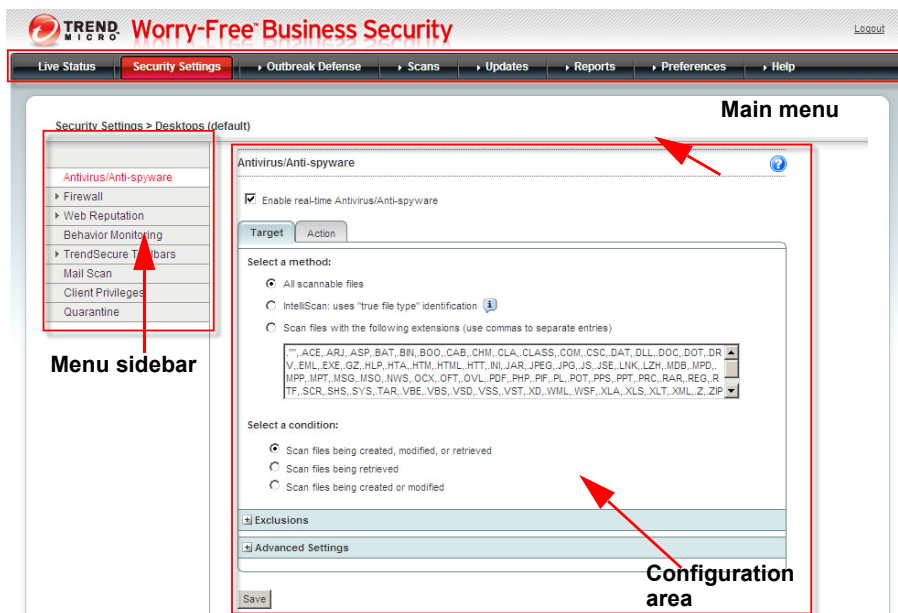






FIGURE 2-2. Web console Overview

## Web Console Icons

The table below describes the icons displayed on the Web console and explains what they are used for.

TABLE 2-2. Web console Icons

| Icon  | Description  |
|---|--|
|  | <b>Help icon.</b> Opens the online help.   |
|  | <b>Refresh icon.</b> Refreshes the view of current screen.   |
|  | <b>Expand/Collapse section icon.</b> Displays/hides sections. You can expand only one section at a time. |
|  | <b>Information icon.</b> Displays information pertaining to a specific item.                             |

## Using Live Status and Notifications

When Worry-Free Business Security detects a significant threat or system event, it displays the results in the **Live Status** screen (see Figure 2-3 on page 2-7). You can set Worry-Free Business Security to send notifications whenever these events happen. In addition, you can customize the parameters that trigger notifications and appear on the **Live Status** screen.

### Setting Up Notifications

Use **Preferences > Notifications** to set up event notifications or customize parameters for the events. Refer to *Working with Notifications* on page 10-1 for more information.

#### **Trend Micro recommended settings for Notifications**

By default, all events listed on the **Notifications** screen are selected and trigger the Security Server to send a notification to the Administrator.

Click a notification to display the notification content detail and customize the details, if necessary.

The following settings are the default values used by Worry-Free Business Security.

- **Antivirus**  
Virus/malware detected on desktops/servers exceeds 5 incidents within 1 hour
- **Anti-spyware**  
Spyware/grayware detected on desktops/servers exceeds 15 incidents within 1 hour
- **Web Threat Protection**  
URL violation exceeds 200 incidents within 1 hour
- **Behavior Monitoring**  
Policy violation exceeds 20 incidents within 1 hour
- **Network Virus**  
Network viruses detected exceeds 10 incidents within 1 hour
- **Unusual System Events**  
The available free disk space is decreasing to less than 1%

## Using Live Status

The **Live Status** screen is the first screen that displays when opening the Web console. All the information you need to know is displayed on one screen.

The refresh rate for information displayed in the Live Status screen varies per section. In general, the refresh rate is between 1 to 10 minutes. To manually refresh the screen information, click **Refresh**.

The screenshot shows the Trend Micro Security Dashboard for Small and Medium Business. The 'Live Status' section is active, displaying a 'Last updated' timestamp of 12/20/2007 11:52:27 and a 'Refresh' button. The dashboard is divided into two main sections: Threat Status and System Status.

| Threat Status       |   |
|---------------------|---|
| Outbreak Defense    | <b>WORM_ZOTOB_A</b> is actively circulating!  |
| Antivirus           | More than 1 virus incidents were detected on all client security agents within 1 hour(s) interval at 12/7/2007 14:50:29. More than 1 virus incidents detected for Exchange Server within 1 hour(s) interval at 12/19/2007 15:25:38. |
| Anti-spyware        | More than 1 spyware/grayware incidents were detected on all client security agents within 1 hour(s) interval at 12/7/2007 17:21:01.   |
| Anti-spam           | 17.5% of total messages detected as spam on TV/CSM03 in the last 24 hours.  |
| Web Reputation      | More than 1 blocked URL(s) were accessed within a 1 hour(s) interval at 12/7/2007 20:20:07.   |
| Behavior Monitoring | Normal  |
| Network Viruses     | More than 1 network virus incident(s) detected within 1 hour(s) interval at 12/7/2007 20:00:58.   |

| System Status |   |
|---------------|---|
| License       | Your license expires on 12/31/2007 0:00:00. Expired licenses cannot automatically update components and are vulnerable to all threats.                      |
| Updates       | Last component download time is 11/27/2007 2:00:00. Security Server has not been updated for more than 14 days. Please perform <a href="#">Update Now</a> . |
| System        | The available free disk space is decreasing to less than 96%.   |






Legend: Normal condition Warning Action required


FIGURE 2-3. Live Status screen

## Understanding Icons

The Live Status screen depicts the status of threats and the system using icons. The following table describes what the different icons means:

**TABLE 2-3. Live Status Icons**


| Icon  | Description  |
|---|--|
|  | <p>No action required<br/>Only a few Clients require patching. The virus, spyware, and other malware activity on your computers and network represents an insignificant risk.</p>  |
|  | <p>Warning<br/>Take action to prevent further risk to your network. Typically, a warning icon means that you have a number of vulnerable computers that are reporting too many virus or other malware incidents. When a Yellow Alert (refer to <a href="#">Yellow Alerts</a> on page 2-12) is issued by Trend Micro, the warning displays for Outbreak Defense.</p> <p>Click (  ) next to the warning icon to view detailed information. Click the underlined links to display detailed information and take further actions.</p> |
|  | <p>Action required<br/>Typically, a warning icon means that you have many vulnerable computers that are reporting too many virus or spyware incidents. When a Red Alert (refer to <a href="#">Red Alerts</a> on page 2-11) is issued by Trend Micro, the warning displays for Outbreak Defense.</p> <p>Click (  ) next to the warning icon to view detailed information. Click the underlined links to display detailed information and take further actions.</p>   |

Beside each of the items on the **Live Status** screen is an icon (  ). Clicking the icon reveals a panel of information about that item. From the expanded panel you can click links to be redirected to other screens where you can take actions to resolve problems specific to that panel.

The information displayed on the **Live Status** screen is generated by the Security Server and based on data collected from Clients.

## Threat Status

Threat Status, part of the **Live Status** screen, reports security risks on your network based on Trend Micro recommended policies. The icons warn you if action is necessary to secure the Clients on your network. Expand a section to view more information. You can also click the items in the table to view specific details.

By default, the information is refreshed every hour. To manually refresh the information, click Refresh (.

The following threats are displayed on the **Live Status** screen:

- *Outbreak Defense* on page 2-9
- *Red Alerts* on page 2-11
- *Yellow Alerts* on page 2-12
- *Antivirus* on page 2-12
- *Anti-spyware* on page 2-12
- *Web Threat Protection* on page 2-12
- *Behavior Monitoring* on page 2-12
- *Network Viruses* on page 2-12

## Outbreak Defense

The Security Server determines whether your network has an outbreak problem based on policies that it downloads from Trend Micro. When there is a problem, the Security Server displays a red (dangerous) or yellow (warning) alert icon and triggers Outbreak Defense. During Outbreak Defense, the Security Server might take protective actions such as blocking ports, downloading components, and running

scans. You can view these actions by clicking **View** from the **Threat Information** section in **Outbreak Defense > Current Status**.

**Automatic Response Details** ?

Trend Micro Client Server Messaging Security for SMB will automatically deploy a response to a world wide virus outbreak.

| Desktops/Servers |               |
|------------------|---------------|
| <b>Antivirus</b> |               |
| Shared folders:  | Read only     |
| Blocked ports:   | 80; 1024      |
| Blocked files:   | new_virus.vbs |

| Exchange Server(s)                          |                              |
|---|------------------------------|
| <b>Attachment Blocking</b>                  |                              |
| Block all attachments:                      | No                           |
| Extension(s) to block:                      | *.exe; *.pif                 |
| Shared folders:                             | Read only                    |
| Attachment(s) to block:                     | aa.exe; bb.pif               |
| Action for blocked attachment(s):           | Quarantine                   |
| <b>Content Filtering (Match All)</b>        |                              |
| Message subject to block:                   | n/a                          |
| Exact match message subject to block:       | n/a                          |
| Message attachment(s) to block:             | *.exe;*.scr;*.pif;*.vbs;*.js |
| Exact match message attachment(s) to block: | n/a                          |
| Action for content filter violation:        | Quarantine                   |
| <b>Content Filtering (Match Any)</b>        |                              |
| Keyword to filter:                          | n/a                          |
| Action for content filter violation:        | n/a                          |

**FIGURE 2-4. Automatic Response Details**

During an outbreak alert, clicking the underlined link from the **Vulnerable Computers** or **Computers to Cleanup** section opens the **Current Threat** screen to show you how the Security Server is protecting your Clients and network. Under normal conditions, clicking these links opens the **Potential Threats** screen where

you can view at-risk Clients and initiate scanning to check for vulnerabilities and clean damaged Clients. See *Outbreak Defense Strategy* on page 6-2.

**Outbreak Defense > Potential Threat** ?

As part of the ongoing health of your network, Trend Micro catches any vulnerable computers and provide you with a list of computers that you must manually clean to remove threats. Below you will find a list of computers that require your attention.

**Vulnerable Computer(s)** 02/13/2007 21:05:10

Your network has the following vulnerabilities that WORM\_SASSER.B exploits. To ensure the security of your network, please follow the instruction and take necessary actions.

[Export](#) [Scan for Vulnerability Now](#) Total: 10 records Page: 35 of 2

| Risk Level | Computer             | IP Address      | Computer Group     | # of Vulnerabilities |
|------------|----------------------|-----------------|--------------------|----------------------|
| ■■■■■      | Desktop US           | 1.0.333.0       | Desktops (default) | 090                  |
| ■■■■■      | Server TW Taipei 101 | 90.222.223.700  | Desktop (default)  | 999                  |
| ■■■■■      | Desktop-49           | 111.222.033.4   | Desktops (default) | 5643575375           |
| ■■■■■      | Server TW Taipei 101 | 111.292.333.440 | Desktops (default) | 6573575              |
| ■■■■■      | Server TW Taipei 101 | 0.222.333.994   | Desktops (default) | 66                   |

■■■■■ Highly Critical ■■■■■ Critical ■■■■■ Important ■■■■■ Moderate ■■■■■ Low

**Computer(s) to Cleanup** 07/03/2007 21:46:17

Client/Server/Messaging Security for SMB has tried to cleanup the computers with the latest pattern. Please see the results below. To manually cleanup using the new components, click Cleanup Now.

[Export](#) [Cleanup Now](#) Total: 10 records Page: 25 of 2

| Computer    | Date/Time           | IP Address      | Computer Group     | Threat Name        | Action Performed |
|-------------|---------------------|-----------------|--------------------|--------------------|------------------|
| Desktop1771 | 05/06/2005 hh:mm:ss | 1.0.333.0       | Desktops (default) | WORM_SASSER.B      | 090              |
| Desktop21   | 05/06/2005 hh:mm:ss | 90.222.223.700  | Desktop (default)  | WORM_SASSER.B      | 999              |
| Desktop221  | 05/06/2005 hh:mm:ss | 111.222.033.4   | Desktops (default) | Never caught virus | 5643575375       |
| Desktop21   | 05/06/2005 hh:mm:ss | 111.292.333.440 | Desktops (default) | Super Virus        | 6573575          |
| Desktop661  | 05/06/2005 hh:mm:ss | 0.222.333.994   | Desktops (default) | Uncatched virus    | 66               |

**FIGURE 2-5. Outbreak Defense > Potential Threat screen**

## Red Alerts

Several infection reports from each business unit reporting rapidly spreading virus/malware, where gateways and email servers may need to be patched. The industry's first 45-minute Red Alert solution process starts: An official pattern release (OPR) is deployed with notification of its availability, any other relevant notifications are sent out, and fix tools and information regarding vulnerabilities are posted on the download pages.

## Yellow Alerts

Infection reports are received from several business units as well as support calls confirming scattered instances. An OPR is automatically pushed to deployment servers and made available for download. In case of an email-spreading malware, content filtering rules, called Outbreak Prevention Policies (OPP), are sent out to automatically block related attachments on servers equipped with the product functionality.

## Antivirus

The Antivirus section displays information from the latest virus scan and virus log entries. The **Number of Incidents** column on the **Virus Threat Incidents** table displays the results of the latest virus scan.

## Anti-spyware

The Anti-spyware section displays the number of Spyware/Grayware Threat Incidents within a certain specified period. The Anti-spyware section also displays the number of Clients that need to be restarted in order to finish the spyware/grayware cleaning process.

## Web Threat Protection

This information is generated based on the number of restricted URLs users visit. When the number of URLs visited exceeds the threshold, the status icon changes.

## Behavior Monitoring

This information is generated based on the number of Behavior Monitoring policy violations on Clients. When the violations count exceeds the threshold, the status icon changes.

## Network Viruses

The information displayed in the Network virus section is generated by the Firewall settings. When a Manual, Scheduled, or Real-time Scan detects a network virus, the information will be displayed in the Network Viruses section of the **Live Status** screen.

## System Status

View information regarding the license status, updated components, and the free space on servers where Agents are installed.

### License

The License section of the **Live Status** screen displays information about the status of your product license, specifically expiration information. To view details about your product license, click the **Product License** link. From the **Product License** screen, you can upgrade or renew your product.

### Updates

The Updates section displays information about the status of component updates for the Security Server or the deployment of updated components to Agents. By default, Worry-Free Business Security downloads components from the Trend Micro ActiveUpdate Server and then makes them available to Agents. Agents download components from the Security Server (that is, the Security Server deploys the component to Agents).

- To deploy updated components to Agents, click **Deploy Now**
- To manually update the Security Server components from the ActiveUpdate Server, click **Update Now**

### Unusual System Events

The System section displays disk space information about Clients that are functioning as servers (running server operating systems). Client/Server Security Agent reports the amount of free disk space available for use on the servers.



---

# Installing Agents

This chapter explains the steps necessary for installing or upgrading Agents. It also provides information on removing the Agent.

The topics discussed in this chapter include:

- *Choosing an Installation Method* on page 3-2
- *Installing, Upgrading, or Migrating Client/Server Security Agents* on page 3-3
- *Agent System Requirements* on page 3-4
- *Performing a Fresh Install* on page 3-5
- *Verifying the Agent Installation, Upgrade, or Migration* on page 3-16
- *Testing the Client Installation with the EICAR Test Script* on page 3-18
- *Removing Agents* on page 3-20

## Choosing an Installation Method

Worry-Free Business Security provides several methods to install the Client/Server Security Agent. This section provides a summary of the different methods.

---

**Tip:** Trend Micro recommends Remote Install or Login Script Setup for organizations enforcing strict policies.

---

- **Internal Web page:** Instruct the users in your organization to go to the internal Web page and download the Client/Server Security Agent setup files (see *Installing from an Internal Web Page* on page 3-6)
- **Login Script Setup:** Automate the installation of the Client/Server Security Agent to unprotected computers when they log on to the domain (see *Installing with Login Script Setup* on page 3-7)
- **Client Packager:** Deploy the Client/Server Security Agent setup or update files to Clients through email (see *Installing with Client Packager* on page 3-9)
- **Remote Install:** Install the Agent on all Windows Vista/2000/XP/Server 2003/Server 2008 Clients from the Web console (see *Installing with Remote Install* on page 3-12)
- **Vulnerability Scanner (TMVS):** Install the Client/Server Security Agent on all Windows Vista/2000/XP (Professional)/Server 2003/Server 2008 Clients with the Trend Micro Vulnerability Scanner (*Installing with Vulnerability Scanner* on page 3-14)

**TABLE 3-1. Trend Micro Client/Server Security Agent Deployment Methods**

|  | Web page  | Login scripts                                 | Client packager   | Remote install    | TMVS              |
|--|---|---|-------------------|-------------------|-------------------|
| Suitable for deployment across the WAN                 | Yes   | No  | Yes               | No                | No                |
| Suitable for centralized administration and management | Yes   | Yes   | No                | Yes               | Yes               |
| Requires user intervention                             | Yes   | No  | Yes               | No                | No                |
| Requires IT resource                                   | No  | Yes   | Yes               | Yes               | Yes               |
| Suitable for mass deployment                           | No  | Yes   | No                | Yes               | Yes               |
| Bandwidth consumption                                  | Low, if scheduled   | High, if Clients are started at the same time | Low, if scheduled | Low, if scheduled | Low, if scheduled |
| Required Privileges                                    | Administrator privileges required for all installation methods. |   |                   |                   |                   |

---

**Note:** To use any of these Client/Server Security Agent deployment methods, you must have local Administrator rights on the target Clients.

---

## Installing, Upgrading, or Migrating Client/Server Security Agents

This section provides information on the following:

- *Agent System Requirements* on page 3-4
- Performing a fresh Client/Server Security Agent install with your chosen installation method (see *Choosing an Installation Method* on page 3-2)

- Upgrading from a previous version of Client/Server Security Agent to the current version (see *Verifying the Agent Installation, Upgrade, or Migration* on page 3-16)
- Migrating from a third-party antivirus installation to the current version of Worry-Free Business Security (see *Verifying the Agent Installation, Upgrade, or Migration* on page 3-16)

---

**Note:** Close any running applications on Clients before installing the Client/Server Security Agent. If you install while other applications are running, the installation process may take longer to complete.

---

## Agent System Requirements

The following table describes the minimum system requirements for Client/Server Security Agents:

**TABLE 3-2. Installation requirements**

| Requirement | Minimum Specifications  |
|-------------|---|
| Processor   | <ul style="list-style-type: none"> <li>• Intel™ Pentium™ x86 or compatible processor</li> <li>• x64 processor supporting AMD64 and Intel EM64T technologies</li> </ul> <p>Clock speed requirements vary depending on the operating system:</p> <ul style="list-style-type: none"> <li>• 1GHz (Windows Server® 2008, SBS 2008, or EBS 2008)</li> <li>• 800MHz (Windows Vista®)</li> <li>• 450MHz (Windows® 2000, SBS 2000, XP, Server 2003, SBS 2003, or Home Server)</li> </ul> |
| Memory      | <ul style="list-style-type: none"> <li>• 512MB (x86 systems)</li> <li>• 1GB (x64 systems)</li> <li>• 4GB (Windows Essential Business Server 2008 or Windows Small Business Server 2008 systems)</li> </ul>  |
| Disk space  | 300MB   |

**TABLE 3-2. Installation requirements (Continued)**

| Requirement                       | Minimum Specifications   |  |
|-----------------------------------|--|--|
| Operating system                  | <b>Series or Family</b>  | <b>Supported Service Packs or Releases</b> |
|                                   | Windows 2000   | SP2, SP3, or SP4                           |
|                                   | Windows Small Business Server (SBS) 2000   | No service pack or SP1a                    |
|                                   | Windows XP   | No service pack, SP1, SP2, or SP3          |
|                                   | Windows Server 2003 (includes Storage Server 2003)   | No service pack, SP1, R2, or SP2           |
|                                   | Windows SBS 2003   | No service pack, SP1, R2, or SP2           |
|                                   | Windows Vista  | No service pack or SP1                     |
|                                   | Windows Home Server  | No service pack                            |
|                                   | Windows Server 2008  | No service pack                            |
|                                   | Windows SBS 2008   | No service pack                            |
|                                   | Windows Essential Business Server (EBS) 2008   | No service pack                            |
|                                   | <b>Note:</b> All major editions and 64-bit versions of these operating systems are supported unless noted otherwise. |  |
| Web browser (for Web-based setup) | Internet Explorer 5.5 SP2 or later   |  |
| Display                           | 256-color display or higher with resolutions of 800x600 or higher  |  |

## Performing a Fresh Install

Follow one of the procedures below if this is the first time you are installing Client/Server Security Agent on target computers.

## Installing from an Internal Web Page

If you installed the Trend Micro Security Server to a computer running Windows 2000, Windows XP, or Windows Server 2003 with Internet Information Server (IIS) 5.0 or 6.0, or Apache 2.0.54, users can install the Client/Server Security Agent from the internal Web site created during master setup.

This is a convenient way to deploy the Client/Server Security Agent. You only have to instruct users to go to the internal Web page and download the Client/Server Security Agent setup files.

---

**Tip:** You can use Vulnerability Scanner to see which users have not followed the instructions to install from the Web console (see *Using Vulnerability Scanner to Verify the Client Installation* on page 3-16 for more information).

---

Users must have Microsoft Internet Explorer 5.5 or later with the security level set to allow ActiveX controls to successfully download the Client/Server Security Agent setup files. The instructions below are written from the user perspective. Email your users the following instructions to install the Client/Server Security Agent from the internal Web server.

### To install from the internal Web page:

1. Open an Internet Explorer window and type:

```
https://{Trend Micro Security  
Server_name}:{port}/SMB/console/html/client
```

If you are NOT using SSL, type `http` instead of `https`.


2. Click **Install Now** to start installing the Client/Server Security Agent.

---

**Note:** For Windows Vista, ensure **Protected Mode** is enabled.  
To enable **Protected Mode**, in Internet Explorer, click **Tools > Internet Options > Security**.

---

The installation starts. Once installation is completed, the screen displays the message, "Agent installation is complete".

3. Verify the installation by checking if the Client/Server Security Agent icon  appears in the Windows system tray.

## Installing with Login Script Setup

Use Login Script Setup to automate the installation of the Client/Server Security Agent on unprotected computers when they log on to the domain. Login Script Setup adds a program called `autopcc.exe` to the server login script. The program `autopcc.exe` performs the following functions:

- Determines the operating system of the unprotected computer and the Client/Server Security Agent
- Updates the scan engine, virus pattern file, Damage Cleanup Services components, cleanup file, and program files

---

**Note:** In order to enforce the use of login script installation method, Clients must be listed in the Windows Active Directory of the server that is performing the installation.

---

### To add `autopcc.exe` to the login script using Login Script Setup:

1. On the computer where you installed Worry-Free Business Security, open `C:\Program Files\Trend Micro\Security Server\PCCSRV\Admin\SetupUsr.exe`. The **Login Script Setup** utility loads. The console displays a tree showing all domains on your network.
2. Browse for the Windows 2000/Server 2003/Server 2008 computer whose login script you want to modify, select it, and then click **Select**. The server must be a primary domain controller and you must have Administrator access.  
Login Script Setup prompts you for a user name and password.
3. Type your user name and password. Click **OK** to continue.

The **User Selection** screen appears. The **Users** list shows the computers that log on to the server. The **Selected users** list shows the users whose computer login script you want to modify.

- To modify the login script of a single user or multiple users, select them from **Users** and then click **Add**
- To modify the login script of all users, click **Add All**
- To exclude a user whose computer you previously modified, select the name in **Selected users** and click **Delete**
- To reset your choices, click **Delete All**

4. Click **Apply** when all the target users are in the **Selected users** list.  
A message appears informing you that you have modified the server login scripts successfully.
5. Click **OK**. The Login Script Setup utility will return to its initial screen.
  - To modify the login scripts of other servers, repeat steps 2 to 4
  - To close Login Script Setup, click **Exit**

---

**Note:** When an unprotected computer logs on to the servers whose login scripts you modified, `autopcc.exe` will automatically install the Agent to it.

---

## Installing with Windows 2000/Server 2003/Server 2008 Scripts

If you already have an existing login script, Login Script Setup will append a command that executes `autopcc.exe`; otherwise, it creates a batch file called `ofcscan.bat` (contains the command to run `autopcc.exe`).

Login Script Setup appends the following at the end of the script:

```
\\{Server_name}\ofcscan
```

where:

`{Server_name}` is the computer name or IP address of the computer where the Trend Micro Security Server is installed.

---

**Tip:** If the environment cannot resolve server names by DNS, replace `{Server_name}` with `{Server_IP_Address}`.

---

The Windows 2000 login script is on the Windows 2000 server (through a net logon shared directory), under:

```
\\Windows 2000 server\{system drive}\WINNT\SYSVOL\  
domain\scripts\ofcscan.bat
```

The Server 2003 login script is on the Server 2003 server (through a net logon shared directory), under:

```
\\Windows 2003 server\{system drive}\%windir%\sysvol\  
domain\scripts\ofcscan.bat
```

The Server 2008 login script is on the Server 2008 server (through a net logon shared directory), under:

```
\\Windows 2008 server\{system drive}\%windir%\sysvol\  
domain\scripts\ofcscan.bat
```

## Installing with Client Packager

Client Packager can compress setup and update files into a self-extracting file to simplify delivery through email, CD-ROM, or similar media.

When users receive the package, all they have to do is double-click the file to run the setup program. Client/Server Security Agents installed using Client Packager report to the server where Client Packager created the setup package. This tool is especially useful when deploying the Agent or update files to Clients in low-bandwidth remote offices.

---

**Note:** Client packager requires a minimum of 370MB free disk space on the Client. Windows Installer 2.0 is necessary for the Client to run an MSI package.

---

Client Packager can create two types of self-extracting files:

- **Executable**

---

**Note:** In Windows Vista, the program must be executed with Administrator rights (Run as Administrator).

---

- **Microsoft Installer Package Format (MSI):** This file type conforms to the Microsoft Windows Installer package specifications and can be used for silent and/or Active Directory deployment. For more information on MSI, see the Microsoft Web site.

---

**Tip:** Trend Micro recommends using Active Directory to deploy an MSI package with **Computer Configuration** instead of **User Configuration**. This helps ensure that the MSI package will be installed regardless of which user logs on to the machine.

---

**To create a package with the Client Packager GUI:**

1. On the Trend Micro Security Server, open Windows Explorer.
  2. Go to `\PCCSRV\Admin\Utility\ClientPackager`.
  3. Double-click `ClnPack.exe` to run the tool. The **Client Packager** console opens.
- 

**Note:** You must run the program from the Trend Micro Security Server only.

---

4. In **Target operating system**, select the operating system for which you want to create the package.
  5. Select the type of package you want to create:
    - **Setup:** Select if installing the Agent.
    - **Update:** Select if updating Client/Server Security Agent components only.
  6. Select from among the following installation options under **Options**:
    - **Silent Mode:** Creates a package that installs on the Client in the background, unnoticeable to the user. The installation status window will not appear.
    - **MSI Package:** Creates a package that conforms to the Microsoft Windows Installer Package Format.
- 

**Note:** The MSI package is for Active Directory deployment only. For local installation, create an `.exe` package.

---

- **Disable Prescan (only for fresh-install):** Disables the normal file scanning that Worry-Free Business Security performs before starting setup.
7. Under **Components**, select the components to include in the installation package:
    - **Program:** All components
    - **Scan engine:** The latest Scan Engine on the Trend Micro Security Server

- **Virus pattern:** The latest Virus Pattern File on the Trend Micro Security Server
  - **Vulnerability pattern:** The latest Vulnerability Pattern File on the Trend Micro Security Server.
  - **Spyware components:** The latest Spyware components on the Trend Micro Security Server.
  - **Common Firewall Driver:** The driver for Firewall
  - **Network Virus Pattern:** The latest pattern file specifically for network viruses
  - **DCE/DCT:** The latest Virus Cleanup Engine and template on the Trend Micro Security Server
  - **IntelliTrap pattern:** The latest IntelliTrap Pattern File on the Trend Micro Security Server.
8. Ensure that the location of the `ofcscan.ini` file is correct next to **Source file**. To modify the path, click  to browse for the `ofcscan.ini` file. By default, this file is located in the `\PCCSRV` folder of the Trend Micro Security Server.
  9. In **Output file**, click  to specify the file name (for example, `ClientSetup.exe`) and the location to create the package.
  10. Click **Create** to build the package. When Client Packager finishes creating the package, the message “Package created successfully” appears. To verify successful package creation, check the output directory you specified.
  11. Send the package to your users through email, or copy it to a CD or similar media and distribute among your users.

---

**WARNING!** *You can only send the package to the Client/Server Security Agents that report to the server where the package was created. Do not send the package to Client/Server Security Agents that report to other Trend Micro Security Servers.*

---

## Installing with an MSI File

If you are using Active Directory, you can install the Client/Server Security Agent by creating a Microsoft Windows Installer file. Use Client Packager to create a file with an `.msi` extension. You can take advantage of Active Directory features by

automatically deploying the Agent to all Clients simultaneously with the MSI file, rather than requiring each user to install Client/Server Security Agent themselves.

For more information on MSI, see the Microsoft Web site ([www.microsoft.com](http://www.microsoft.com)). For instructions on creating an MSI file, see *Installing with Client Packager* on page 3-9).

## Installing with Remote Install

You can remotely install the Client/Server Security Agent to multiple Windows Vista, 2000, XP (Professional Edition only), Server 2003, Server 2008, SBS 2008, and EBS 2008 computers at the same time.

---

**Note:** To use Remote Install, you need administrator rights on the target computers. For Windows Vista, Server 2008, SBS 2008, and EBS 2008, you will need to use a built-in domain administrator password because of Windows User Account Control (UAC).

---

### To install CSA with Remote Install:

---

**Note:** Installing Client/Server Security Agent on Windows Vista requires a few additional steps. Refer to *Enabling Client/Server Security Agent Remote Install on Windows Vista Clients* on page 3-13 for additional details.

---

1. From the Web console main menu, click **Security Settings > Add**. The **Add Computer** screen appears.
2. Select **Desktop or Server**, from the **Computer Type** section.
3. Select **Remote Install**, from the **Method** section.
4. Click **Next**. The **Remote Install** screen appears.
5. From the list of computers in the **Groups and Computers** box, select a Client, and then click **Add**. A prompt for a user name and password to the target computer appears.
6. Type your user name and password, and then click **Login**. The target computer appears in the **Selected Computers** list box.

7. Repeat these steps until the list displays all the Windows computers in the **Selected Computer** list box.
8. Click **Install** to install the Client/Server Security Agent to your target computers. A confirmation box appears.
9. Click **Yes** to confirm that you want to install the Agent to the Client. A progress screen appears as the program copies the Client/Server Security Agent files to each target computer.

When Worry-Free Business Security completes the installation to a target computer, the installation status will appear in the **Result** field of the selected computers list, and the computer name appears with a green check mark.

---

**Note:** Remote Install will not install the Client/Server Security Agent on a machine already running a Trend Micro Security Server.

---

## Enabling Client/Server Security Agent Remote Install on Windows Vista Clients

Installing Client/Server Security Agent on Windows Vista Clients requires additional steps.

### To enable Remote Install on Windows Vista Clients:

1. On the Client, temporarily enable File and Printer Sharing.

---

**Note:** If the company security policy is to disable Windows Firewall, proceed to step 2 to start the Remote Registry service.

---

- a. Open Windows Firewall in the Control Panel.
- b. Click **Allow a program through Windows Firewall**. If you are prompted for an Administrator password or confirmation, type the password or provide confirmation. The Windows Firewall Settings window appears.
- c. Under the **Program or port list** in the **Exceptions** tab, make sure the **File and Printer Sharing** check box is selected.
- d. Click **OK**.

2. Temporarily start the Remote Registry service.
  - a. Open Microsoft Management Console.

---

**Tip:** Type `services.msc` in the Run window to open Microsoft Management Console.

---

- b. Right-click **Remote Registry** and select **Start**.
3. If required, return to the original settings after installing Client/Server Security Agent on the Windows Vista Client.

## Installing with Vulnerability Scanner

Use Trend Micro Vulnerability Scanner (TMVS) to detect installed antivirus solutions, search for unprotected computers on your network, and install the Client/Server Security Agent on them. To determine if computers need protection, Vulnerability Scanner pings ports that antivirus solutions normally use.

This section explains how to install the Agent with Vulnerability Scanner. For instructions on how to use Vulnerability Scanner to detect antivirus solutions, refer to [Using Vulnerability Scanner to Verify the Client Installation](#) on page 3-16.

---

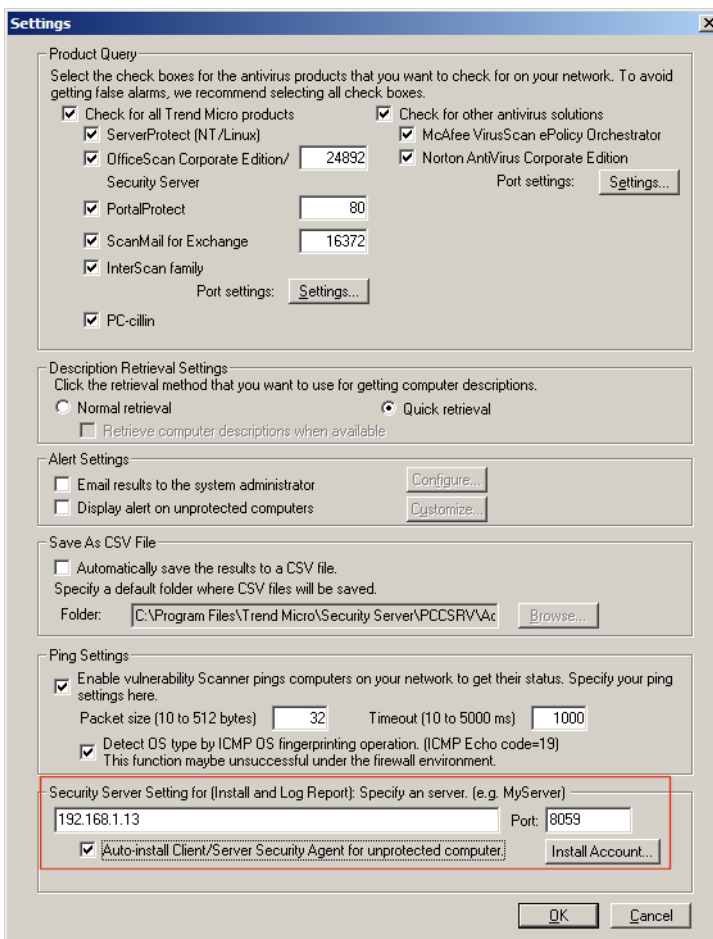
**Note:** You can use Vulnerability Scanner on machines running Windows 2000 or Server 2003; however, the machines should not be running Terminal Server. You cannot install the Client/Server Security Agent on a Client with Vulnerability Scanner if an installation of the Trend Micro Security Server is present on the Client.

---

### To install the Client/Server Security Agent with Vulnerability Scanner:

1. In the drive where you installed the Trend Micro Security Server, go to the following location: Worry-Free Business Security > **PCCSRV** > **Admin** > **Utility** > **TMVS**. Double-click `TMVS.exe`. The **Trend Micro Vulnerability Scanner** console appears.

2. Click **Settings**. The **Settings** screen appears.



**FIGURE 3-1. TMVS Settings screen**

3. Under **Trend Micro Security Server Setting (for Install and Log Report)**, type the Trend Micro Security Server name or IP address and port number.
4. Select the **Auto-install Client/Server Security Agent for unprotected computer** check box.

5. Click **Install Account**.
6. Type a user name and password with Administrator privileges to the server (or domain), and then click **OK**.
7. Click **OK** to go back to the main TMVS screen.
8. Click **Start** to begin checking the computers on your network and begin Client/Server Security Agent installation.

## Verifying the Agent Installation, Upgrade, or Migration

After completing the installation or upgrade, verify that the Client/Server Security Agent is properly installed.

### To verify the installation:

- Look for the Worry-Free Business Security program shortcuts on the Windows **Start** menu of the Client running the Agent.
- Check if Worry-Free Business Security is in the **Add/Remove Programs** list of the Client's Control Panel.
- Use Vulnerability Scanner (see *Using Vulnerability Scanner to Verify the Client Installation* on page 3-16).
- Use the Client Mover tool (see *Client Mover* on page 13-11 or *Moving Clients* on page 4-9)

## Using Vulnerability Scanner to Verify the Client Installation

Verify all the Clients in the network have Agents installed. Automate the Vulnerability Scanner by creating scheduled tasks. For information on how to automate Vulnerability Scanner, see the Worry-Free Business Security online help.

---

**Note:** You can use Vulnerability Scanner on machines running Windows 2000 and Server 2003; however, the machines should not be running Terminal Server.

---

**To verify Agent installation using Vulnerability Scanner:**

1. In the drive where you installed the Trend Micro Security Server, go to **Trend Micro Security Server > PCCSRV > Admin > Utility > TMVS**. Double-click `TMVS.exe`. The **Trend Micro Vulnerability Scanner** console appears.
2. Click **Settings**. The **Settings** screen appears.
3. Under **Product Query**, select the **Security Server** check box and specify the port that the server uses to communicate with Clients.
4. Under **Description Retrieval Settings**, click the retrieval method to use. Normal retrieval is more accurate, but it takes longer to complete.

If you click **Normal retrieval**, you can set Vulnerability Scanner to try to retrieve computer descriptions, if available, by selecting the **Retrieve computer descriptions when available** check box.

5. To have results automatically sent to yourself or to other Administrators in your organization, select the **Email results to the system administrator** check box under **Alert Settings**. Then click **Configure** to specify your email settings.
  - In **To**, type the email address of the recipient.
  - In **From**, type your email address.
  - In **SMTP server**, type the address of your SMTP server. For example, type `smtp.example.com`. The SMTP server information is required.
  - In **Subject**, type a new subject for the message or accept the default subject.
6. Click **OK** to save your settings.
7. To display an alert on unprotected computers, click the **Display alert on unprotected computers** check box. Then click **Customize** to set the alert message. The **Alert Message** screen appears.
8. Type a new alert message in the text box or accept the default message and then click **OK**.
9. To save the results as a comma-separated value (CSV) data file, select the **Automatically save the results to a CSV file** check box. By default, Vulnerability Scanner saves CSV data files to the TMVS folder. If you want to change the default CSV folder, click **Browse**, select a target folder on your computer or on the network, and then click **OK**.

10. Under **Ping Settings**, specify how Vulnerability Scanner will send packets to the computers and wait for replies. Accept the default settings or type new values in the **Packet size** and **Timeout fields**.
11. Click **OK**. The **Vulnerability Scanner** console appears.
12. To run a manual vulnerability scan on a range of IP addresses, do the following:
  - a. In **IP Range to Check**, type the IP address range that you want to check for installed antivirus solutions and unprotected computers.
  - b. Click **Start** to begin checking the computers on your network.
13. To run a manual vulnerability scan on computers requesting IP addresses from a DHCP server, do the following:
  - a. Click the **DHCP Scan** tab in the **Results** box. The **DHCP Start** button appears.
  - b. Click **DHCP Start**. Vulnerability scanner begins listening for DHCP requests and performing vulnerability checks on Clients as they log on to the network.

Vulnerability Scanner checks your network and displays the results in the **Results** table. Verify that all servers, desktops, and portable computers have the Agent installed.

If Vulnerability Scanner finds any unprotected servers, desktops, or portable computers, install the Agent on them using your preferred Agent installation method. Refer to *Choosing an Installation Method* on page 3-2.

## Testing the Client Installation with the EICAR Test Script

Trend Micro recommends testing your product and confirming that it works by using the EICAR test script. EICAR, the European Institute for Computer Antivirus Research, developed the test script as a safe way to confirm that antivirus software is properly installed and configured. Visit the EICAR Web site for more information:

<http://www.eicar.org>

The EICAR test script is an inert text file with a `.com` extension. It is not a virus and does not contain any fragments of viral code, but most antivirus software will react to

it as if it were a virus. Use it to simulate a virus incident and confirm that email notifications, HTTP scanning, and virus logs work properly.

---

**WARNING!** *Never use real virus/malware to test your antivirus installation.*

---

**To test the Agent installation with the EICAR test script:**

1. Make sure Real-time Scan is enabled on the Agent.
2. On the Client, copy the following string and paste it into Notepad or any plain text editor:

```
X5O!P%@AP[4\PZX54(P^)7CC)7}$EICAR-STANDARD-ANTIVIRUS-TEST-FILE!$H+H*
```

3. Save the file as `EICAR.com` to a temporary directory. Client/Server Security Agent should immediately detect the file.
4. To test other Clients on your network, attach the `EICAR.com` file to an email message and send it to one of the Clients.

---

**Note:** Trend Micro also recommends testing a compressed version of the EICAR file. Using compression software, compress the test script and perform the steps above.

---

**To test the Agent installation HTTP scanning capability:**

Download the EICAR.com test script from either of the following URLs:

[http://www.eicar.org/anti\\_virus\\_test\\_file.htm](http://www.eicar.org/anti_virus_test_file.htm)

Client/Server Security Agent should show that it detected the EICAR test file.

## Removing Agents

There are two ways to remove Agents—from the Web console or by running its uninstallation program.

### Removing Client/Server Security Agent Using Its Uninstallation Program

---

**WARNING!** *Removing Agents makes Clients vulnerable to threats.*

---

If you granted users the privilege to remove the Agent, instruct them to run the Agent uninstallation program from their computer.

#### To run the Agent uninstallation program:

1. On the Windows **Start** menu, click **Settings > Control Panel > Add or Remove Programs**.
2. Select **Trend Micro Client/Server Security Agent** and click **Change/Remove**. The Client/Server Security Agent **Uninstallation** screen appears and prompts for the uninstall password, if configured.
3. Type the uninstall password and then click **OK**. The Client/Server Security Agent **Uninstallation** screen shows the progress of the uninstallation. When uninstallation is complete, the message “Uninstallation is complete” appears.

### Removing the Client/Server Security Agent using the Web Console

You can also remotely remove Client/Server Security Agent using the Web console.

**WARNING!** *Removing Agents makes Clients vulnerable to threats.*

---

#### To remotely remove an Agent using the Web console:

1. Log on to the Web console.
2. Click the **Security Settings** tab.

3. In the Security Groups tree, select the Client from which you want to remove the Agent and then click **Remove**. The **Remove Computer** screen appears.
4. Under **Removal Type**, click **Uninstall the selected agents**, and then click **Apply**. A confirmation message appears.
5. Click **OK**. A popup screen appears and displays the number of uninstall notifications that were sent by the server and received by the Client.
6. Click **OK**.

To verify that the Agent has been removed, refresh the **Security Settings** screen. The Client should no longer appear on the Security Groups tree.



---

# Working with Groups

This chapter explains the concept and usage of groups in Worry-Free Business Security.

The topics discussed in this chapter include:

- *Overview of Groups* starting on page 4-2
- *Viewing Clients in a Group* starting on page 4-2
- *Adding Groups* starting on page 4-6
- *Removing Groups* starting on page 4-7
- *Adding Clients to Groups* starting on page 4-7
- *Moving Clients* starting on page 4-9
- *Replicating Group Settings* starting on page 4-9

## Overview of Groups

In Worry-Free Business Security, groups are a collection of computers and servers that share the same configuration and run the same tasks. By grouping Clients, simultaneously configure, and manage, multiple Agents.

For ease of management, group Clients based on the departments to which they belong or the functions they perform. Also, group Clients that are at a greater risk of infection to apply a more secure configuration to all of them in just one setting. Refer to *Configuring Desktop and Server Groups* on page 5-1 for more information.

By default, the Security Server creates groups based on your existing Windows Server domains and refers to each Client according to computer name. You can delete or rename the groups that the Security Server has created for you or transfer Clients from one group to another.

## Viewing Clients in a Group

From the **Security Settings** screen, you can manage all Clients on which you installed Client/Server Security Agents and customize your security settings for agents.

## Navigation Path: Security Settings > Select a Group

| Name | IP Address | Virus Pattern | Virus Engine | Online/Offline | Platform            | Architecture | V |
|------|------------|---------------|--------------|----------------|---------------------|--------------|---|
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 0 |
| ...  | 5.129.00   | 8.650.1001    | 8.650.1001   | Offline        | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 5 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 1 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 2 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x64          | 7 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 8 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 1 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 0 |
| ...  | 5.129.00   | 8.650.1038    | 8.650.1038   | Offline        | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | Win2000 Professa... | x86          | 0 |
| ...  | 5.129.00   | 8.650.1038    | 8.650.1038   | Offline        | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 0 |
| ...  | 5.133.00   | 8.650.1038    | 8.650.1038   | Online         | WinXP Service Pa... | x86          | 7 |

**FIGURE 4-1. Security Settings screen showing Clients in a group**

Clients are displayed according to their group in the Security Groups tree. The Security Groups tree is an expandable list of logical groups of Clients.

When you select a group from the left-hand side and click Configure, the Web console displays a new configuration area.

---

**Tip:** To select multiple, adjacent Clients, click the first computer in the range, hold down the SHIFT key, and then click the last computer in the range. To select a range of non-contiguous Clients, click the first computer in the range. Hold down the CTRL key and then click the Clients you want to select.

---

When you select a group from the Security Groups tree on the left side, a list of the Clients in the group appears to the right. The Security Settings screen provides the following information about the Clients in a particular group:

- Name
- IP Address
- Online/Offline status

- Scheduled scan
- Manual scan
- Operating system
- Architecture
- Version of the virus engine and pattern
- Number of virus incidents detected
- Number of spyware incidents detected
- Number of violated URLs
- Number of spam incidents detected
- Status of the POP3 mail scan

Use this information to:

- Ensure your Agents are using the latest engines
- Regulate security settings depending on the number of virus and spyware incidents
- Take special action on Clients with unusually high counts
- Understand overall network condition

From here you can:

- **Configure groups:** Refer to *Configuring Desktop and Server Groups* on page 5-1.
- **Replicate settings from one group to another:** Refer to *Replicating Group Settings* on page 4-9.
- **Add new groups:** Refer to *Adding Groups* on page 4-6.
- **Remove groups:** Refer to *Removing Groups* on page 4-7.
- **Move Clients from one Group to another or one Security Server to another:** Refer to *Moving Clients* on page 4-9.
- **Reset counters:** Click **Reset Counters** on the **Security Settings Toolbar**. Resets the virus/malware, spyware/grayware, and URL violation incidents.

## After an Upgrade

If you have upgraded Worry-Free Business Security from a previous or evaluation version, Worry-Free Business Security preserves your old computers and groups in the Security Groups tree.

Worry-Free Business Security 5.1 does not support individual settings for a Client within a group. If your prior version contained these, they will now appear as a “mixed” group. To individually configure a Client, create a new group and add only this Client into the group. Configure the group as required.

## Security Settings Toolbar

The Security Settings Toolbar contains the tools you need to work with Groups and Clients.



**FIGURE 4-2. The Security Settings Toolbar**

This section briefly describes the tools in the toolbar on the **Security Settings** screen. Refer to the online help for details about how to use these tools to configure your Client/Server Security Agents.

**TABLE 4-1. Tools for Security Settings**

| Tool               | Description  |
|--------------------|--|
| Configure          | Configure Client settings at a group level for such settings as scanning, firewall, client privileges, and quarantine directory. Refer to <i>Configuring Desktop and Server Groups</i> on page 5-1 for more details.                                 |
| Replicate Settings | Use this tool to replicate configuration settings from one group of Clients to one or more other groups of Clients. Refer to <i>Replicating Group Settings</i> on page 4-9 for more details.   |
| Add Group          | Use this tool to create a new group of Clients. Refer to <i>Adding Groups</i> on page 4-6 for more details.  |
| Add                | Use Add to install Client/Server Security Agents or add icons to Clients which already have an Agent. After adding a new Client, drag and drop the icon into an appropriate group.   |
| Remove             | Use this tool to either remove a Client or Group icon from the Web console or uninstall Client/Server Security Agent from the selected Client. Refer to <i>Removing Groups</i> starting on page 4-7 or <i>Removing Agents</i> starting on page 3-20. |
| Move               | Use this tool to move a Client from one Security Server to another Security Server. Refer to <i>Moving Clients</i> on page 4-9 for more details.   |

**TABLE 4-1. Tools for Security Settings**

| Tool          | Description  |
|---------------|--|
| Reset Counter | Resets the virus/malware, spyware/grayware, and URL violation incidents. |

## Adding Groups

Create groups to collectively manage multiple Clients.

**Note:** Clients must be associated with a Group. A Client cannot reside outside of a Group.

### Navigation Path: Security Settings > Add Group

Security Settings > Add Group

**Group Type**

Select the type of group you would like to add.

Desktops

Servers

**Name**

Specify a name for this new group.

Name:

**Settings**

You can import settings from an existing group to this new group and modify the settings later to suit your needs.

Import settings from group: Desktops (default) ▼

**FIGURE 4-3. Add Group screen**

#### To add a group:

1. From the **Add Group** screen, update the following as required:
  - **Group Type**
    - Desktops
    - Servers
  - **Name**
  - **Import settings from group:** Imports the security settings from the selected group.

2. Click **Save**.

## Removing Groups

When Administrator's remove a group, all the Clients in the group re-register themselves with the Security Server and get included in the default Group, based on their operating system. For example, if the Client is a server, it gets included in the default server group.

### **Navigation Path: Security Settings**

#### **To remove a group:**

1. From the **Security Settings** screen, select the Group.
2. Click **Remove**.

## Adding Clients to Groups

In Worry-Free Business Security, add Clients to a Group using any one of the following methods:

- Email Notification Install
- Remote Install
- Create domain login script

## Navigation Path: Security Settings

Security Settings > Add Computer

Computer(s) will be automatically added to default groups. Afterwards, you can drag and drop a computer to another group.

**Computer Type**  
Select the type of computer(s) you would like to add.

- Desktop or server
- Exchange server

**Method**  
Specify the method for desktop installation.

- Email notification install
- Remote install
- Create domain login script

**Settings**  
You can import settings from an existing group to this new group and modify the settings later to suit your needs.

Import settings from group: Desktops (default)

Next > Cancel

**FIGURE 4-4. Add Computer screen**

### To add a Client to a Group:

1. From the **Security Settings** screen, click the **Add** tool on the toolbar.
2. Update the following as required:
  - **Computer Type:** The type of Client.
    - Desktop or server
  - **Method**
    - **Remote install:** Remotely install the Agent on the Client. Refer to *Installing with Remote Install* on page 3-12 for more information.
    - **Create domain login script:** Install the Agent using domain login script. The next time the Client logs on to the network, the Agent will be installed. Refer to *Installing with Login Script Setup* on page 3-7 for more information.
3. Click **Next**. Follow the onscreen instructions.

---

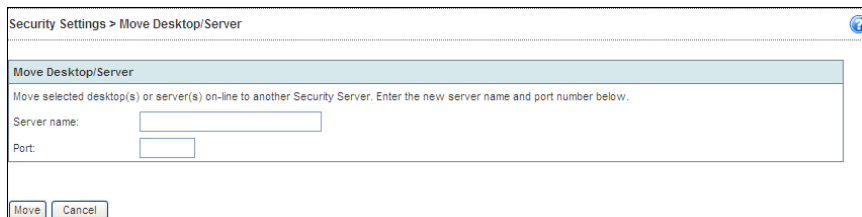
**Tip:** For more information about installing Agents, refer to *Installing Agents* on page 3-1.

---

## Moving Clients

Worry-Free Business Security gives you the option to move Clients from one Group to another or one Security Server to another.

**Navigation Path: Security Settings > Select a Group**



Security Settings > Move Desktop/Server

**Move Desktop/Server**

Move selected desktop(s) or server(s) on-line to another Security Server. Enter the new server name and port number below.

Server name:

Port:

**FIGURE 4-5. Move Desktop/Server screen**

**To move a Client from one Group to another:**

1. From the **Security Settings** screen, select the **Group**, and then select the **Client**.
2. Drag the Client into another **Group**. The Client will inherit the settings of the new Group.

**To move a Client from one Security Server to another:**

1. From the **Security Settings** screen, select the **Group**, and then select the **Client**.
2. Click **Move**.
3. Type the new server name and port.
4. Click **Move**.

## Replicating Group Settings

Use Replicate Settings to copy the settings from one group your network to another. The settings will apply to all Clients that are part of the destination group.

## Navigation Path: Security Settings > Select a Group



The screenshot shows a window titled "Security Settings > Replicate Settings". Below the title bar is a header "Replicate Settings" with a help icon. The main content area contains the text "All settings from source group will be replicated to specified target groups." followed by "Source: Guest". Under "Target groups:", there are two checkboxes: "Desktops (default)" and "Sales". At the bottom of the window are "Apply" and "Cancel" buttons.

**FIGURE 4-6. Replicate Settings screen**

### To replicate settings from one group to another:

1. From the **Security Settings** screen, select the source Group that must replicate its settings to other Groups.
2. Click **Replicate Settings**.
3. Select the target groups that must inherit the settings from the source Group.
4. Click **Apply**.

---

# Configuring Desktop and Server Groups

This chapter explains the steps necessary for configuring desktop and server groups. The topics discussed in this chapter include:

- *Overview of Configurable Options for Desktop and Server Groups* on page 5-2
- *Antivirus/Anti-spyware* on page 5-3
- *Firewall* on page 5-8
- *Web Threat Protection* on page 5-15
- *Behavior Monitoring* on page 5-16
- *TrendSecure* on page 5-21
- *POP3 Mail Scan* on page 5-23
- *Client Privileges* on page 5-25
- *Quarantine* on page 5-28

## Overview of Configurable Options for Desktop and Server Groups

In Worry-Free Business Security, Groups are a collection of Clients that share the same configuration and run the same tasks. By grouping Clients, simultaneously configure, and manage, multiple Clients. For more information, refer to *Working with Groups* on page 4-1.

The following items can be accessed by selecting a group from the **Security Settings** screen and clicking **Configure**:

**TABLE 5-1. Configuration Options for Desktop and Server Groups**

| Option                 | Description  | Enabled by Default?   |
|------------------------|--|---|
| Antivirus/Anti-spyware | Configure Real-time Scan, antivirus, and anti-spyware options                            | Enabled (Real-time Scan)  |
| Firewall               | Configure Firewall options   | Disabled  |
| Web Threat Protection  | Configure In Office and Out of Office Web Threat Protection options                      | <ul style="list-style-type: none"> <li>• In Office: Enabled, Low</li> <li>• Out of Office: Enabled, High</li> </ul> |
| Behavior Monitoring    | Configure Behavior Monitoring options  | Disabled  |
| TrendSecure            | Configure In Office and Out of Office options for Transaction Protector and TrendProtect | <ul style="list-style-type: none"> <li>• In Office: Disabled</li> <li>• Out of Office: Enabled</li> </ul>           |
| POP3 Mail Scan         | Configure the scanning of POP3 email messages  | Disabled  |
| Client Privileges      | Configure access to settings from the Client console                                     | N/A   |
| Quarantine             | Specify the Quarantine directory   | N/A   |

---

**Note:** Other Client settings, such as IM Content Filtering, apply to all Clients and are accessible through the **Desktop/Server** tab on the **Preferences > Global Settings** screen.

---

## Antivirus/Anti-spyware

Virus/malware scanning is a central part of the Worry-Free Business Security strategy. During a scan, the Trend Micro scan engine works together with the virus pattern file to perform the first level of detection, using a process called pattern matching. Since each virus/malware contains a unique “signature” or string of tell-tale characters that distinguish it from any other code, the experts at TrendLabs capture inert snippets of this code in the pattern file. The engine then compares certain parts of each scanned file to the pattern in the virus pattern file, looking for a match. When the scan engine detects file containing a threat, it executes an action such as clean, quarantine, delete, or replace with text/file. You can customize these actions when you set up your scanning tasks.

Worry-Free Business Security provides three types of scans to protect Clients from Internet threats:

- **Real-time Scan:** Real-time Scan is a persistent and ongoing scan. Each time a file is received, opened, downloaded, copied, or modified, Real-time Scan scans the file for threats. Refer to *Configuring Real-time Scan* on page 5-5 for more information..
- **Manual Scan:** Manual Scan is an on-demand scan. Manual Scanning eliminates threats from files on Clients. This scan also eradicates old infections, if any, to minimize reinfection. During a Manual Scan, Worry-Free Business Security takes actions against threats according to the actions set by the Administrator. Refer to *Manual Scan* on page 7-2 for more information.
- **Scheduled Scan:** A Scheduled Scan is similar to Manual Scan but scans all files at the configured time and frequency. Use Scheduled Scans to automate routine scans on Clients and improve threat management efficiency. Refer to *Scheduled Scan* on page 7-2 for more information.

### Default Real-Time Scan Settings

By default, Worry-Free Business Security sets the Agents to run Real-time Scanning. No additional input is required to protect Clients.

Agents uses Trend Micro recommended settings when scanning for Internet threats. When it detects a threat, it performs the default action against those threats and logs the actions. View the results in the **Live Status** screen or by generating reports or log queries.

The default Real-Time Scan settings recommended by Trend Micro are:

- Real-time Scanning is enabled.
- Agents uses IntelliScan to decide which files to scan.
- Agents do not scan folders where Trend Micro products are installed.
- When Agents detect a threat, the default action is ActiveAction.
- When Agents detect spyware/grayware, the default action is to Clean. Agents delete uncleanable files.

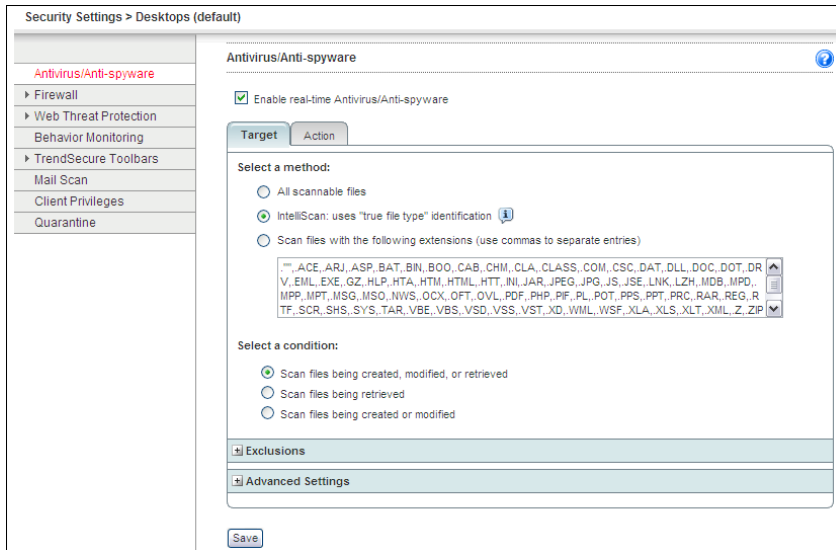
Agents back up all files before taking action against detected threats.

**TABLE 5-2. Recommended Actions for Threats**

| <b>Threat</b> | <b>Recommended Action</b> |
|---------------|---------------------------|
| All types     | Clean                     |
| Virus/malware | Clean                     |
| Worms/Trojans | Quarantine                |
| Joke          | Quarantine                |
| Packed files  | Quarantine                |
| Test virus    | Pass                      |
| Other threats | Clean                     |

## Configuring Real-time Scan

**Navigation Path: Security Settings > Select a group > Configure > Antivirus/Anti-spyware**



**FIGURE 5-1. Security Settings > Antivirus/Anti-spyware screen**

### To configure Real-time Scan:

- From the **Target** tab on the **Antivirus/Anti-spyware** screen, update the following as required:
  - Enable real-time Antivirus/Anti-spyware**
  - Files to scan
    - All scannable files:** Only encrypted or password-protected files are excluded.
    - IntelliScan:** Scans files based on true-file type. Refer to *Trend Micro IntelliScan* on page C-4 for more information.
    - Scan files with the following extensions:** Worry-Free Business Security will scan files with the selected extensions. Separate multiple entries with commas (,).

- Select when to scan files
  - **Scan files being created, modified, or retrieved**
  - **Scan files being retrieved**
  - **Scan files being created or modified**
- **Exclusions:** Exclude specific files, folders, or files with certain extensions from being scanned.
  - **Enable Exclusions**
  - **Do not scan the directories where Trend Micro products are installed**
  - **Do not scan the following directories:** Type the name of the folder to exclude from the scan. Click **Add**. To remove a folder, select the folder and click **Delete**.
  - **Do not scan the following files:** Type the name of the file to exclude from the scan. Click **Add**. To remove a file, select the file and click **Delete**.
  - **Do not scan files with the following extensions:** Type the name of the extension to exclude from the scan. Click **Add**. To remove an extension, select the extension and click **Delete**.

---

**Note:** If Microsoft Exchange Server is running on the Client, Trend Micro recommends excluding all Microsoft Exchange Server folders from scanning. To exclude scanning of Microsoft Exchange server folders on a global basis, go to **Preferences > Global Settings**, click the **Desktop/Server** tab, and then select **Exclude Microsoft Exchange server folders when installed on Microsoft Exchange server**.

---

- **Advanced Settings**
  - **Enable IntelliTrap** (for antivirus): IntelliTrap detects malicious code such as bots in compressed files. Refer to *Trend Micro IntelliTrap* on page C-5 for more information.
  - **Scan mapped drives and shared folders on the network** (for antivirus)
  - **Scan floppy during system shutdown** (for antivirus)
  - **Scan compressed files** (for antivirus): Select the number of layers to scan.

- **Spyware/Grayware Approved List** (for anti-spyware): This list contains details of the approved spyware/grayware applications. Click the link to update the list. Refer to *Editing the Spyware/Grayware Approved List* on page 7-6 for more information.
2. From the **Action** tab on the **Antivirus/Anti-spyware** screen, specify how Worry-Free Business Security should handle detected threats:
    - **Action for Virus Detections**
      - **ActiveAction:** Use Trend Micro preconfigured actions for threats. Refer to *Trend Micro ActiveAction* on page C-4 for more information.
      - **Perform the same action for all detected Internet threats:** Select from Pass, Delete, Rename, Quarantine, or Clean. If you select Clean, set the action for an uncleanable threat.
      - **Customized action for the following detected threats:** Select from Pass, Delete, Rename, Quarantine, or Clean for each type of threat. If you select Clean, set the action for an uncleanable threat.
      - **Backup detected file before cleaning:** Saves an encrypted copy of the infected file in the following directory on the Client:  
C:\Program Files\Trend Micro\Client Server Security Agent\Backup
    - **Action for Spyware/Grayware Detections**
      - **Clean:** When cleaning spyware/grayware, Worry-Free Business Security could delete related registry entries, files, cookies, and shortcuts. Processes related to the spyware/grayware could also be terminated.
      - **Deny Access**
- 
- WARNING!** *Denying spyware/grayware access to the Client does not remove the spyware/grayware threat from infected Clients.*
- 
- **Advanced Settings**
    - **Display an alert message on the desktop or server when a virus/spyware is detected**
3. Click **Save**.

Additionally, configure who receives notifications when an event occurs. Refer to *About Notifications* on page 10-2.

## Firewall

Help protect Clients from hacker attacks and network viruses by creating a barrier between the Client and the network. Firewall can block or allow certain types of network traffic. Additionally, Firewall will identify patterns in network packets that may indicate an attack on Clients.

WFBS has two options to choose from when configuring the Firewall, simple mode and advanced mode. Simple mode enables the firewall with the Trend Micro recommended default settings. Use advanced mode to customize the Firewall settings.

---

**Tip:** Trend Micro recommends uninstalling other software-based firewalls before deploying and enabling Firewall.

For the latest information regarding third-party firewall compatibility issues, see <http://esupport.trendmicro.com/support/viewxml.do?ContentID=en-120437>

---

### Default Firewall Simple Mode Settings

Firewall provides default settings to give you a basis for initiating your Client firewall protection strategy. The defaults are meant to include common conditions that may exist on Clients, such as the need to access the Internet and download or upload files using FTP.

---

**Note:** By default, WFBS disables the Firewall on all new Groups and Clients.

---

**TABLE 5-3. Default Firewall Settings**

| Security Level | Description   |
|----------------|---|
| Low            | Inbound and outbound traffic allowed, only network viruses blocked. |

| <b>Settings</b>            | <b>Status</b> |
|----------------------------|---------------|
| Intrusion Detection System | Disabled      |
| Alert Message (send)       | Disabled      |

| <b>Exception Name</b> | <b>Action</b> | <b>Direction</b>      | <b>Protocol</b> | <b>Port</b>        |
|-----------------------|---------------|-----------------------|-----------------|--------------------|
| DNS                   | Allow         | Incoming and outgoing | TCP/UDP         | 53                 |
| NetBIOS               | Allow         | Incoming and outgoing | TCP/UDP         | 137, 138, 139, 445 |
| HTTPS                 | Allow         | Incoming and outgoing | TCP             | 443                |
| HTTP                  | Allow         | Incoming and outgoing | TCP             | 80                 |
| Telnet                | Allow         | Incoming and outgoing | TCP             | 23                 |
| SMTP                  | Allow         | Incoming and outgoing | TCP             | 25                 |
| FTP                   | Allow         | Incoming and outgoing | TCP             | 21                 |
| POP3                  | Allow         | Incoming and outgoing | TCP             | 110                |
| MSA                   | Allow         | Incoming and outgoing | TCP             | 16372, 16373       |

| <b>Location</b> | <b>Firewall Settings</b> |
|-----------------|--------------------------|
| In Office       | Off                      |
| Out of Office   | Off                      |

## Traffic Filtering

Firewall monitors all incoming and outgoing traffic; providing the ability to block certain types of traffic based on the following criteria:

- Direction (incoming or outgoing)
- Protocol (TCP/UDP/ICMP)
- Destination ports
- Destination computer

Refer to *Working with Firewall Exceptions* on page 5-13 to filter traffic.

## Intrusion Detection System

Firewall also includes an Intrusion Detection System (IDS). When enabled, IDS can help identify patterns in network packets that may indicate an attack on the Client. Firewall can help prevent the following well-known intrusions:

- **Oversized Fragment:** This exploit contains extremely large fragments in the IP datagram. Some operating systems do not properly handle large fragments and may throw exceptions or behave in other undesirable ways.
- **Ping of Death:** A ping of death (abbreviated “POD”) is a type of attack on a computer that involves sending a malformed or otherwise malicious ping to a computer. A ping is normally 64 bytes in size (or 84 bytes when IP header is considered); many computer systems cannot handle a ping larger than the maximum IP packet size, which is 65,535 bytes. Sending a ping of this size can crash the target computer.
- **Conflicting ARP:** This occurs when the source and the destination IP address are identical.
- **SYN flood:** A SYN flood is a form of denial-of-service attack in which an attacker sends a succession of SYN requests to a target's system.
- **Overlapping Fragment:** This exploit contains two fragments within the same IP datagram and have offsets that indicate they share positioning within the datagram. This could mean that fragment A is being completely overwritten by fragment B, or that fragment A is partially being overwritten by fragment B. Some operating systems do not properly handle overlapping fragments and may throw exceptions or behave in other undesirable ways. This is the basis for the so called teardrop Denial of service Attacks.

- **Teardrop Attack:** The Teardrop attack involves sending IP fragments with overlapping, over-sized, payloads to the target machine. A bug in the TCP/IP fragmentation re-assembly code of various operating systems caused the fragments to be improperly handled, crashing them as a result of this.
- **Tiny Fragment Attack:** When any fragment other than the final fragment is less than 400 bytes, indicating that the fragment is likely intentionally crafted. Small fragments may be used in denial of service attacks or in an attempt to bypass security measures or detection.
- **Fragmented IGMP:** When a Client receives a fragmented Internet Group Management Protocol (IGMP) packet, the Client's performance may degrade or the computer may stop responding (hang) and require a reboot to restore functionality.
- **LAND Attack:** A LAND attack is a DoS (Denial of Service) attack that consists of sending a special poison spoofed packet to a computer, causing it to behave undesirably. The attack involves sending a spoofed TCP SYN packet (connection initiation) with the target host's IP address and an open port as both source and destination.

## Stateful Inspection

The Firewall is a stateful inspection firewall; it monitors all connections to the Client making sure the transactions are valid. It can identify specific conditions in a transaction, predict what transaction should follow, and detect when normal conditions are violated. Filtering decisions, therefore, are based not only on profiles and policies, but also on the context established by analyzing connections and filtering packets that have already passed through the Firewall.

## Configuring the Firewall

---

**Note:** Configure the Firewall for In Office and Out of Office. If Location Awareness is disabled, In Office settings will be used for Out of Office connections. Refer to [Location Awareness](#) on page 11-5.

---

## Navigation Path: Security Settings > Select a group > Configure > Firewall > In Office/Out of Office

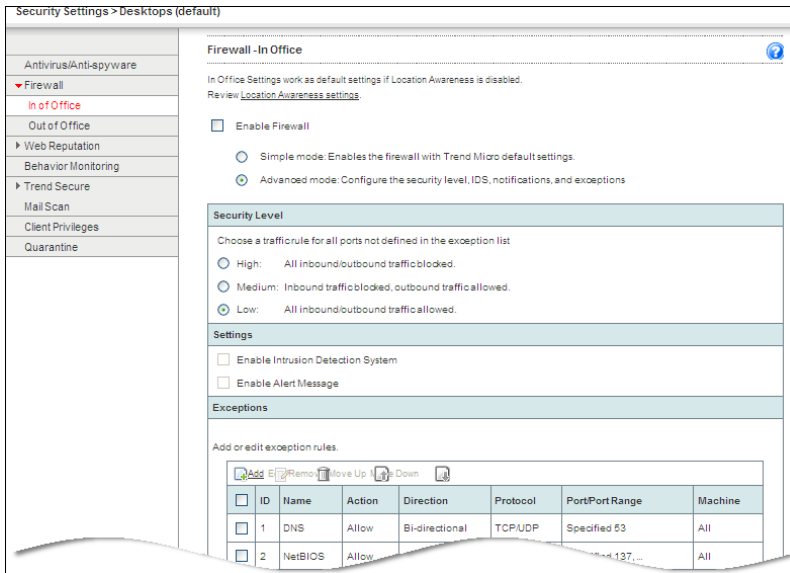


FIGURE 5-2. Firewall - In Office screen

### To configure the Firewall:

- From the **Firewall** screen, update the following options as required:
  - Enable Firewall:** Select to enable the firewall for the group and location.
    - Simple Mode:** Enables firewall with default settings. Refer to *Default Firewall Settings* on page 5-8.
    - Advanced Mode:** Enables firewall with custom settings. Refer to *Advanced Firewall Options* on page 5-12 for configuration options.
- Click **Save**. The changes take effect immediately.

### Advanced Firewall Options

Use the Advanced Firewall options to configure custom firewall settings for a particular group of Clients.

**To configure advanced firewall options:**

1. From the **Firewall** screen, select **Advanced Mode**.
2. Update the following options as required:
  - **Security Level:** The security level controls the traffic rules to be enforced for ports not in the exception list.
    - **High:** Blocks inbound and outbound traffic.
    - **Medium:** Blocks inbound traffic and allows outbound.
    - **Low:** Allows inbound and outbound traffic.
  - **Settings**
    - **Enable Intrusion Detection System:** Intrusion Detection System identifies patterns in network packets that may indicate an attack. Refer to *Intrusion Detection System* on page 5-10 for more information.
    - **Enable Alert Messages:** When Worry-Free Business Security detects a violation, the Administrator is notified. Refer to *Configuring Notifications* on page 14-12 for more information.
    - **Exceptions:** Ports in the exception list will not be blocked. Refer to *Working with Firewall Exceptions* on page 5-13 for more information.
3. Click **Save**.

## Working with Firewall Exceptions

Exceptions comprise specific settings that allow or block different kinds of traffic based on Direction, Protocol, Port and Machines.

For example, during an outbreak, you may choose to block all Client traffic, including the HTTP port (port **80**). However, if you still want to grant the blocked Clients access to the Internet, you can add the Web proxy server to the exception list.

### Adding Exceptions

**To add an exception:**

1. From the **Firewall - Advanced Mode** screen in the **Exceptions** section, click **Add**.
2. Update the options as required:
  - **Name:** Specify a unique name for the exception.

- **Action:** **Block** or **Allow** the traffic for the selected protocol, ports, and Clients.
  - **Direction:** **Inbound** refers to traffic flowing from the Internet and into your network. **Outbound** refers to traffic flowing from your network and into the Internet.
  - **Protocol:** The network traffic protocol for this exclusion.
  - **Ports**
    - **All ports** (default)
    - **Range**
    - **Specified ports:** Separate individual entries with commas.
  - **Machine**
    - **All IP addresses** (default)
    - **IP range**
    - **Single IP:** The IP address of a particular Client.
3. Click **Save**. The **Firewall Configuration** screen appears with the new exception in the exception list.

## Editing Exceptions

### To edit an exception:

1. From the **Firewall - Advanced Mode** screen in the **Exceptions** section, select the exclusion you want to edit.
2. Click **Edit**.
3. Update the options as required. Refer to *Adding Exceptions* on page 5-13 for more information.
4. Click **Save**.

## Removing Exceptions

### To remove an exception:

1. From the **Firewall - Advanced Mode** screen, in the **Exceptions** section, select the exclusion you want to delete.
2. Click **Remove**.

## Web Threat Protection

Web Threat Protection helps prevent access to URLs that pose potential security risks by checking any requested URL against the Trend Micro Web Security database. Depending on the location (In Office/Out of Office) of the Client, configure a different level of security.

If Web Threat Protection blocks a URL and you feel the URL is safe, add the URL to the Approved URLs list. For information on adding a URL to the Approved URL list, refer to *Web Threat Protection* on page 11-7 for more details.

## Configuring Web Threat Protection

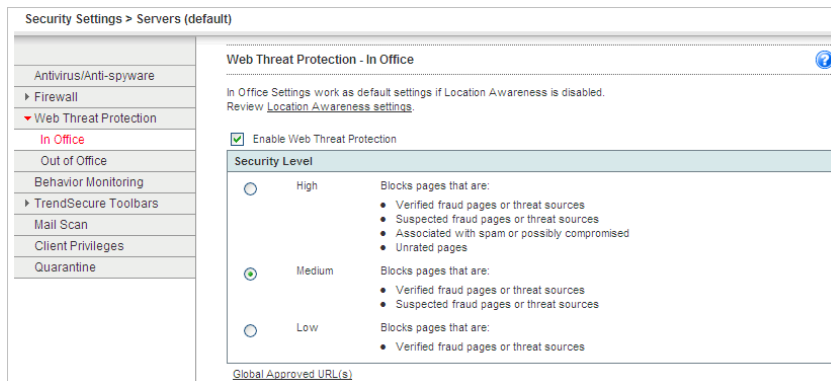
Web Threat Protection evaluates the potential security risk of all requested URLs by querying the Trend Micro Security database at the time of each HTTP request.

---

**Note:** Configure the Web Threat Protection settings for In Office and Out of Office. If Location Awareness is disabled, In Office settings will be used for Out of Office connections. Refer to *Location Awareness* on page 11-5.

---

**Navigation Path:** Security Settings > Select a group > Configure > Web Threat Protection > In Office/Out of Office



**FIGURE 5-3.** Security Settings > Web Threat Protection screen

**To edit Web Threat Protection settings:**

1. From the **Web Threat Protection** screen, update the following as required:
  - **Enable Web Threat Protection**
  - **Security Level**
    - **High:** Blocks pages that are:
      - Verified fraud pages or threat sources
      - Suspected fraud pages or threat sources
      - Associated with spam or possibly compromised
      - Unrated pages
    - **Medium:** Blocks pages that are:
      - Verified fraud pages or threat sources
      - Suspected fraud pages or threat sources
    - **Low:** Blocks pages that are verified fraud pages or threat sources
2. Click **Save**.

## Behavior Monitoring

Agents constantly monitor Clients for unusual modifications to the operating system or on installed software. Administrators (or users) can create exception lists that allow certain programs to start while violating a monitored change, or completely block certain programs. In addition, programs with a valid digital signature are always allowed to start. To troubleshoot the validity of digital signatures, refer to *Invalid/Expired Digital Signatures* on page 14-14.

Refer to Table 5-4 on page 5-16 to view the description and default value of the monitored changes.

**TABLE 5-4. Description and Default Values of Monitored Changes**

| Monitored Change    | Description   | Default Value      |
|---------------------|---|--------------------|
| New Startup Program | Many malicious programs configure Windows so that all applications automatically load a program library (DLL). This allows the malicious routines in the DLL to run every time an application starts. | Ask when necessary |

**TABLE 5-4. Description and Default Values of Monitored Changes**

| <b>Monitored Change</b>                | <b>Description</b>  | <b>Default Value</b> |
|--|---|----------------------|
| Hosts File Modification                | The Hosts file matches domain names with IP addresses. Many malicious programs modify the Hosts file so that the Web browser is redirected to infected, non-existent, or fake Web sites.  | Always block         |
| Program Library Injection              | Many malicious programs configure Windows so that all applications automatically load a program library (DLL). This allows the malicious routines in the DLL to run every time an application starts.   | Ask when necessary   |
| New Internet Explorer Plugin           | Spyware/grayware programs often install unwanted Internet Explorer plugins, including toolbars and Browser Helper Objects.  | Ask when necessary   |
| Internet Explorer Setting Modification | Many virus/malware change Internet Explorer settings, including the home page, trusted Web sites, proxy server settings, and menu extensions.   | Always block         |
| Shell Modification                     | Many malicious programs modify Windows shell settings to associate themselves to certain file types. This routine allows malicious programs to launch automatically if users open the associated files in Windows Explorer. Changes to Windows shell settings can also allow malicious programs to track the programs used and start alongside legitimate applications. | Ask when necessary   |
| New Service                            | Windows services are processes that have special functions and typically run continuously in the background with full administrative access. Malicious programs sometimes install themselves as services to stay hidden.  | Ask when necessary   |
| Security Policy Modification           | Modifications in Windows Security Policy can allow unwanted applications to run and change system settings.   | Always block         |
| Firewall Policy Modification           | The Windows Firewall policy determines the applications that have access to the network, the ports that are open for communication, and the IP addresses that can communicate with the computer. Many malicious programs modify the policy to allow themselves to access to the network and the Internet.   | Ask when necessary   |
| System File Modification               | Certain Windows system files determine system behavior, including startup programs and screen saver settings. Many malicious programs modify system files to launch automatically at startup and control system behavior.   | Always block         |

**TABLE 5-4. Description and Default Values of Monitored Changes**

| Monitored Change         | Description  | Default Value      |
|--------------------------|--|--------------------|
| Duplicated System File   | Many malicious programs create copies of themselves or other malicious programs using file names used by Windows system files. This is typically done to override or replace system files, avoid detection, or discourage users from deleting the malicious files. | Ask when necessary |
| Layered Service Provider | A Layered Service Provider (LSP) can manipulate inbound and outbound network traffic. Malicious programs can use LSPs to intercept network communication and gain network access.  | Ask when necessary |

## Environment Variables

Worry-Free Business Security supports using environment variables to specify specific folders on the Client. Use these variables to create exceptions for specific folders. The following table describe the available variables:

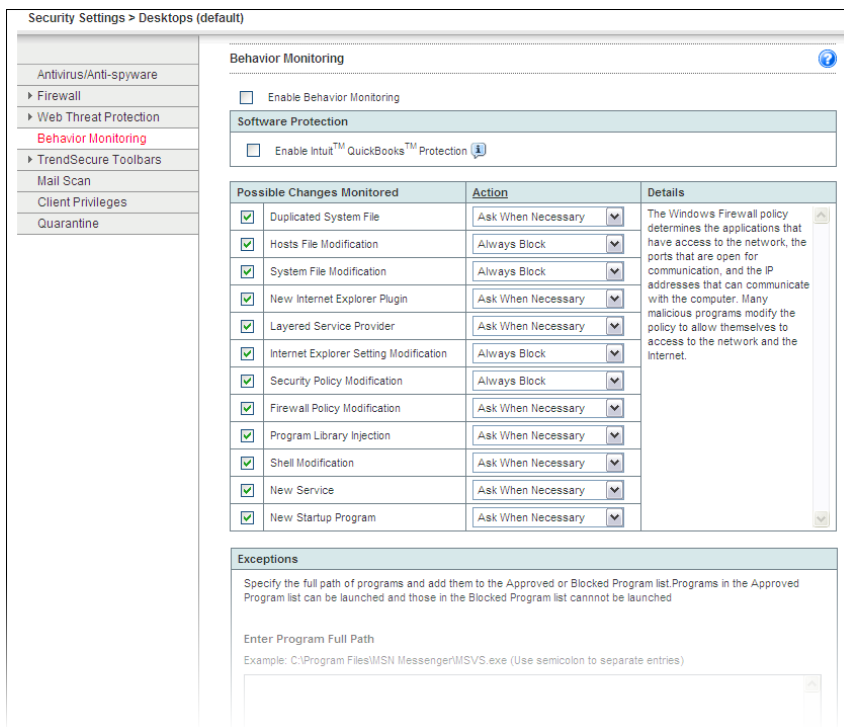
**TABLE 5-5. Supported Variables**

| Environment Variable | Points to the...         |
|----------------------|--------------------------|
| \$windir\$           | Windows folder           |
| \$rootdir\$          | root folder              |
| \$tempdir\$          | Windows temporary folder |
| \$programdir\$       | Program Files folder     |

## Configuring Behavior Monitoring

Behavior Monitoring protects Clients from unauthorized changes to the operating system, registry entries, other software, or files and folders.

## Navigation Path: Security Settings > Select a group > Configure > Behavior Monitoring



**FIGURE 5-4.** Behavior Monitoring screen

### To edit Behavior Monitoring settings:

1. From the **Behavior Monitoring** screen, update the following as required:
  - **Enable Behavior Monitoring**



**Note:** Navigate to **Security Settings > Select a group > Configure > Client Privileges** and select **Edit exception list** in the **Behavior Monitoring** section.

- **Enable Intuit™ QuickBooks™ Protection:** Protects all Intuit QuickBooks files and folders from unauthorized changes by other programs. Enabling this feature will not affect changes made from within Intuit QuickBooks programs, but will only prevent changes to the files from other unauthorized applications. The following products are supported:
  - QuickBooks Simple Start
  - QuickBooks Pro
  - QuickBooks Premier
  - QuickBooks Online

---

**Tip:** Trend Micro recommends enabling this feature.

---

- **Monitored Changes:** Select **Always Allow**, **Ask When Necessary**, or **Always Block** for each monitored change. Refer to Table 5-4 on page 5-16 for information on the different changes.
  - **Exceptions:** Exceptions include an **Approved Program List** and a **Blocked Program List**: Programs in the **Approved Programs List** can be started even if it violates a monitored change, while programs in the **Blocked Program List** can never be started.
    - **Full Path of Program:** Type the full path of the program. Separate multiple entries with semicolons (;). Click **Add to Approved Programs List** or **Add to Blocked Programs List**. Use environment variables to specify paths, if required. Refer to Table 5-5, “Supported Variables,” on page 5-18 for the list of supported variables.
    - **Approved Programs List:** Programs (maximum of 100) in this list can be started. Click the corresponding  icon to delete an entry.
    - **Blocked Programs List:** Programs (maximum of 100) in this list can never be started. Click the corresponding  icon to delete an entry.
2. Click **Save**.

## TrendSecure

TrendSecure comprises a set of browser-based tools (TrendProtect and Transaction Protector) that enable users to surf the Web securely. TrendProtect warns users about malicious and Phishing Web sites. Transaction Protector determines the safety of your wireless connection by checking the authenticity of the access point.

TrendSecure adds a browser toolbar that changes color depending on the safety of your wireless connection. You can also click the toolbar button to access the following features:

- **Wi-Fi Advisor:** Checks the safety of wireless networks based on the validity of their SSIDs, authentication methods, and encryption requirements.
- **Page Ratings:** Determines the safety of the current page.

---

**Note:** Configure the TrendSecure settings for In Office and Out of Office. If Location Awareness is disabled, In Office settings will be used for Out of Office connections. Refer to *Location Awareness* on page 11-5.

---

## Configuring TrendSecure

Configure the availability of TrendSecure tools to users depending on their location.

---

**Note:** Configure TrendSecure for In Office and Out of Office Connections. If Location Awareness is disabled, Internal Connection settings will be enforced for Out of Office connections. Refer to *Location Awareness* on page 11-5.

---

**Navigation Path:** **Security Settings > Select a group > Configure > TrendSecure Toolbars > In Office/Out of Office**

**To edit the availability of TrendSecure tools:**

1. From the **TrendSecure In Office/Out of Office** screen, update the following as required:
  - **Enable Wi-Fi Advisor:** Checks the safety of wireless networks based on the validity of their SSIDs, authentication methods, and encryption requirements.
  - **Enable Page Ratings:** Determines the safety of the current page.

**2. Click Save.**

---

**Note:** TrendSecure Toolbars can only be made available to Agents from the Web console.  
Users have to install or uninstall the tools from the Agent's console.

---

## POP3 Mail Scan

POP3 Mail Scan and the Trend Micro Anti-Spam toolbar plug-in protect Clients in real-time against security risks and spam transmitted through POP3 email messages.

---

**Note:** By default, POP3 Mail Scan can only scan new messages sent through port 110 in the Inbox and Junk Mail folders. It does not support secure POP3 (SSL-POP3), which is used by Exchange Server 2007 by default.

---

## POP3 Mail Scan Requirements

POP3 Mail Scan supports the following mail clients:

- Microsoft Outlook 2000, 2002 (XP), 2003, and 2007
- Outlook Express 6.0 with Service Pack 2 (on Windows XP only)
- Windows Mail (on Microsoft Vista only)
- Mozilla Thunderbird 1.5 and 2.0

## Anti-Spam Toolbar Requirements

The Trend Micro Anti-Spam toolbar supports the following mail clients:

- Microsoft Outlook 2000, 2002 (XP), 2003, and 2007
- Outlook Express 6.0 with Service Pack 2 (on Windows XP only)
- Windows Mail (on Windows Vista only)

The Anti-Spam toolbar supports the following operating systems:

- Windows XP SP2 32-bit
- Windows Vista 32- and 64-bit

## Enabling Mail Scan

**Navigation Path:** Security Settings > Select a group > Configure > Mail Scan



**FIGURE 5-5. Mail Scan screen**

**To edit the availability of Mail Scan:**

1. From the **Mail Scan** screen, update the following as required:
  - **Enable real-time scan for POP3 mail**
  - **Enable Trend Micro Anti-Spam toolbar**
2. Click **Save**.

## Configuring POP3 Mail Scan to Scan Other Ports

POP3 Mail Scan can be configured to scan messages sent through ports other than default port 110.

---

**Note:** This *advanced* procedure will require you to modify the Windows registry and restart the Trend Micro proxy service on individual clients. Perform this procedure only when necessary and ensure that you back up the registry before you begin.

---

**To configure POP3 Mail Scan to scan non-default ports:**

1. Click **Start > Run**.
2. Type **REGEDIT** and click **OK**. Registry Editor opens.
3. Navigate to the following registry subkey:

```
HKEY_LOCAL_MACHINE\Software\TrendMicro\NSC\TmProxy\
ProtocolHandler\pop3\Redirect\Pop3Mailer
```

4. Right click the value named **Port** and select **Modify**.
5. Ensure that **Decimal** is selected as the **Base** and then specify the port number that you want scanned under **Value data**.
6. Click **OK** and then close Registry Editor.
7. Click **Start > Run**.
8. Type **CMD** and click **OK**.
9. In the command prompt, enter the command **net stop tmproxy** to stop the Trend Micro proxy service
10. After the service stops, enter the command **net start tmproxy** to start the proxy service.

## Client Privileges

Grant Client Privileges to allow users to modify settings of the Agent installed on their computer.

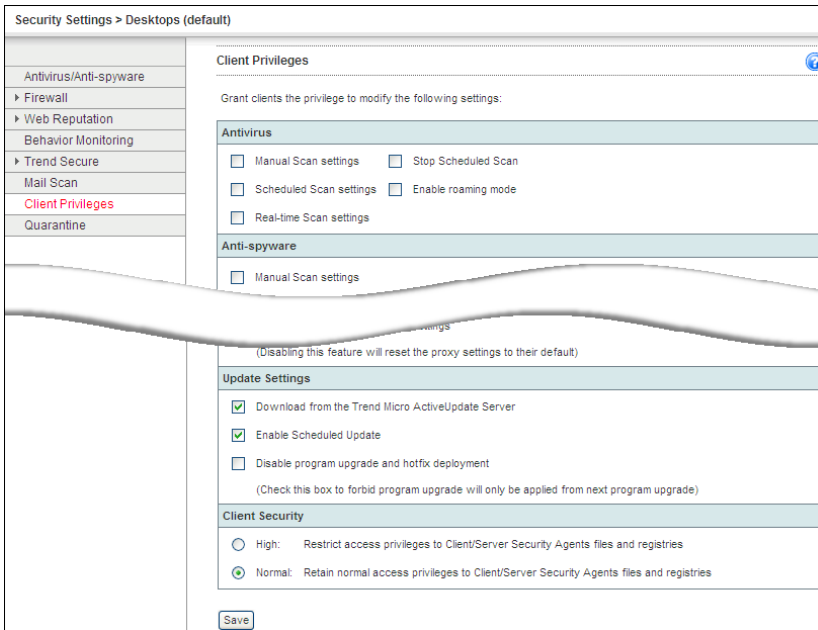
---

**Tip:** To enforce a regulated security policy throughout your organization, Trend Micro recommends granting limited privileges to users. This ensures users do not modify scan settings or unload Client/Server Security Agent.

---

## Configuring Client Privileges

**Navigation Path:** Security Settings > Select a group > Configure > Client Privileges



**FIGURE 5-6.** Client Privileges screen

### To grant privileges to Clients:

1. From the **Client Privileges** screen, update the following as required:
  - **Antivirus/Anti-spyware**
    - **Manual Scan settings**
    - **Scheduled Scan settings**
    - **Real-time Scan settings**
    - **Stop Scheduled Scan**
    - **Enable roaming mode**
  - **Firewall**

- **Display Firewall tab**
- **Allow clients to enable/disable firewall**

---

**Note:** If you allow users to enable or disable the firewall, you cannot change these settings from the Web console. If you do not grant users this privilege, you can change these settings from the Web console. The information under **Local Firewall settings** on the Agent always reflects the settings configured from the Agent, not the Web console.

---

- **Web Threat Protection**
  - **Edit approved URL list**
- **Behavior Monitoring**
  - **Display Behavior Monitoring tab and allow users to customize the lists:** Allow users to enable/disable Behavior Monitoring and configure the Exception List and the Software Protection List.
- **Mail Scan**
  - **Allow users to configure real-time scan for POP3 mail**
- **Proxy Setting**
  - **Allow users to configure proxy settings**
- **Update Privileges**
  - **Perform “Update Now”**
  - **Enable/Disable Scheduled Update**
- **Update Settings**
  - **Download from Trend Micro ActiveUpdate Server:** When users initiate an update, the Agent gets updates from the update source specified on the **Update Source** screen. If the update fails, the Agents attempt to update from the Security Server. Selecting **Download from the Trend Micro ActiveUpdate Server** enables Agents to attempt to update from the Trend Micro ActiveUpdate Server if the update from the Security Server fails.

---

**Tip:** To ensure Agents on portable Clients are updated when they are out of the office, enable **Download from Trend Micro ActiveUpdate Server**.

---

- **Enable Scheduled Update**
- **Disable program upgrade and hot fix deployment**
- **Client Security**
  - **High:** Prevents access to Agent folders, files, and registry entries.
  - **Normal:** Provides read/write access to Agent folders, files, and registry entries.

---

**Note:** If you select **High**, the access permissions settings of the Agent folders, files, and registry entries are inherited from the Program Files folder (for Clients running Windows Vista/2000/XP/Server 2003). Therefore, if the permissions settings (Security settings in Windows) of the WINNT file or Program Files folder are set to allow full read/write access, selecting **High** still allows Clients full read/write access to the Client/Server Security Agent folders, files, and registry entries.

---

2. Click **Save**.

## Quarantine

The Quarantine directory stores the infected files. The quarantine directory can reside on the Client itself or on another server. If an invalid quarantine directory is specified, Agents uses the default quarantine directory on the Client:

```
C:\Program Files\Trend Micro\Client Server Security Agent\SUSPECT
```

The default folder on the server is:

```
C:\Program Files\Trend Micro\Security Server\PCCSRV\Virus
```

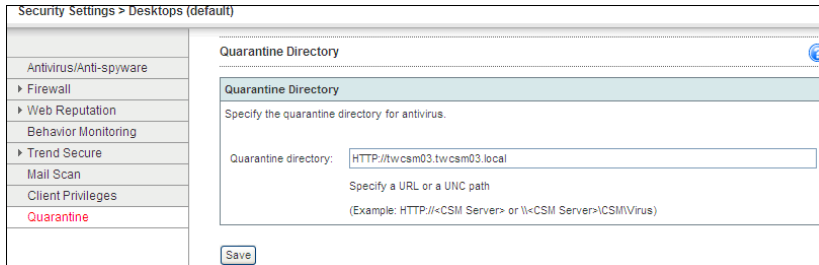
---

**Note:** If the CSA is unable to send the file to the Security Server for any reason, such as a network connection problem, the file remains in the Client suspect folder. The Agent attempts to resend the file when it reconnects to the Security Server.

---

## Configuring the Quarantine Directory

**Navigation Path:** Security Settings > Select a group > Configure > Quarantine



**FIGURE 5-7.** Quarantine Directory screen

### To set the Quarantine directory:

1. From the Quarantine Directory screen, update the following as required:
  - **Quarantine directory:** Type a Uniform Resource Locator (URL) or Universal Naming Convention (UNC) path to store the infected files. For example, `http://www.example.com/quarantine` or `\\TempServer\Quarantine`.
2. Click **Save**.



---

# Using Outbreak Defense

This chapter explains the Outbreak Defense Strategy, how to configure Outbreak Defense, and how to use it to protect networks and Clients.

The topics discussed in this chapter include:

- *Outbreak Defense Strategy* on page 6-2
- *Current Status* on page 6-3
- *Potential Threat* on page 6-9
- *Setting up Outbreak Defense* on page 6-11

## Outbreak Defense Strategy

Outbreak Defense is a key component of Worry-Free Business Security solution and protects your business during a worldwide threat outbreak.

The Outbreak Defense Strategy is based on the idea of an Internet-wide outbreak life cycle. The life of an outbreak is divided into three stages — **Threat Prevention**, **Threat Protection**, and **Threat Cleanup**. Trend Micro counters each stage of the cycle with a defense strategy called Outbreak Defense.

**TABLE 6-1. Outbreak Defense Response to the Outbreak Life Cycle Stages**

| Outbreak Stage   | Outbreak Defense Stage  |
|--|---|
| In the first stage of an outbreak cycle, the experts at Trend Micro observe a threat that is actively circulating on the Internet. At this time, there is no known solution for the threat.  | <p>Threat Prevention</p> <p>Outbreak Defense prevents the threat from attacking your computers and network by taking actions according to the Outbreak Policy downloaded from Trend Micro update servers. These actions include sending alerts, blocking ports and denying access to folders and files.</p> |
| In the second stage of the outbreak, computers that have been affected by the threat pass the threat along to other computers. The threat begins to rapidly spread through local networks causing business interruptions and damaging computers. | <p>Threat Protection</p> <p>Outbreak Defense protects at-risk computers by notifying them to download the latest components and patches.</p>  |
| In the third and final stage of an outbreak, the threat subsides with fewer reported incidents.  | <p>Threat Cleanup</p> <p>Outbreak Defense repairs damage by running Cleanup services. Other scans provide information that Administrators can use to prepare for future threats.</p>  |

## Outbreak Defense Actions

The Outbreak Defense Strategy was designed to manage outbreaks at every point along the outbreak life cycle. Based on the Outbreak Prevention Policy, Automatic Threat Response typically takes pre-emptive steps such as:

- Blocking shared folders to help prevent virus/malware from infecting files in shared folders

- Blocking ports to help prevent virus/malware from using vulnerable ports to spread the infection on the network and Clients

---

**Note:** Outbreak Defense never blocks the port used by the Security Server to communicate with Clients.

---

- Denying write access to files and folders to help prevent virus/malware from modifying files
- Assessing Clients on your network for vulnerabilities that make it prone to the current outbreak
- Deploying the latest components such as the virus pattern file and virus cleanup engine
- Performing a **Cleanup** on all the Clients affected by the outbreak
- If enabled, scanning your Clients and networks and takes action against detected threats

## Current Status

### **Navigation Path: Outbreak Defense > Current Status**

The Web console displays and tracks the status of a world-wide virus/malware outbreak threat on the **Current Status** screen. The status roughly corresponds to the outbreak life cycle.

During an outbreak, Outbreak Defense uses the Outbreak Defense Strategy to protect your computers and networks. In each stage, it refreshes the information in the Current Status page. The three stages of Outbreak Defense:

- Threat Prevention
- Threat Protection

- Threat Cleanup

Outbreak Defense > Current Status

Prevention → Protection → Cleanup

Trend Micro Security Server will automatically deploy a response to a world wide virus outbreak. You will find the details of the threat and the actions that you must take below. Any action that the system cannot take automatically will be shown to you in the Vulnerable Computer(s) and Computer(s) Cleanup sections below. Last updated: 12/20/2007 16:35:30 | Refresh

Prevention ■ Red Alert Enabled

Threat WORM\_ZOTOB.A is currently spreading on the Internet. Trend Micro has taken action to prevent an outbreak on your network. New components will be available shortly. You can learn more about this threat by reading below.

| Threat Information  |            |                   |                 |                            |  |
|---|------------|-------------------|-----------------|----------------------------|--|
| Threat  | Alert Type | Risk Level        | Delivery Method | Vulnerability Exploited    | Automatic Response                     |
| WORM_ZOTOB.A  | Red Alert  | Medium            | Exploit         |                            | <input type="button" value="Disable"/> |
| Date/Time Initialed   |            | Date/Time End     |                 | Automatic Response Details |  |
| 12/7/2007 18:35:30  |            | 1/6/2008 18:35:30 |                 | <a href="#">View...</a>    |  |
| <p>***Testing No.301*** This memory-resident worm drops a copy of itself in the Windows system folder as BOTZOR.EXE. This worm takes advantage of the Microsoft Windows Plug and Play vulnerability to propagate across networks. For more information regarding these vulnerability, refer to the following Microsoft Web page: Microsoft Security Bulletin MS05-039 (OPP No.220 is originally from RedAlertPolicy No.162 from TrendLabs) (Maxoutbreak duration extends to 200 days)</p> |            |                   |                 |                            |  |

Alert Status of your network.

| Alert Status for Online Computers |         |             |
|-----------------------------------|---------|-------------|
| Computer Type                     | Enabled | Not Enabled |
| Desktops/Servers                  | 3       | 0           |
| Exchange servers                  | N/A     | N/A         |

WORM\_ZOTOB.A exploits... and take necessary

**FIGURE 6-1. Outbreak Defense screen—No Threat**

## Threat Prevention

The Threat Prevention stage of the **Current Status** screen displays information about recent threats, Clients that have alerts enabled, and Clients that are vulnerable to the current threat.

Outbreak Defense > Current Status ?

Prevention
>>
Protection
>>
Cleanup

As part of the ongoing health of your network, Trend Micro catches any vulnerable computers and provide you with a list of computers that you must manually clean to remove threats. Below you will find a list of computers that require your attention.

**Prevention** ! Red Alert Enabled 02/13/2007 21:05:10

Threat WORM\_SASSER.B is currently spreading on the Internet. Trend Micro has taken action to prevent an outbreak on your network. Threat solution will be available shortly. [You can learn more about this threat by reading below.](#)

| Threat Information  |            |                                    |                 |                            |  |
|---|------------|------------------------------------|-----------------|----------------------------|--|
| Threat  | Alert Type | Risk Level                         | Delivery Method | Vulnerability Exploited    | Automatic Response                     |
| WORM_SASSER.B   | Red        | High                               | Email           | MS04-011                   | <input type="button" value="Disable"/> |
| Date/Time Initiated   |            | Date/Time Ended [(or to be ended)] |                 | Automatic Response Details |  |
| 05/06/2005 hh:mm:ss   |            | 05/08/2005 hh:mm:ss                |                 | <a href="#">View...</a>    |  |
| This worm exploits the Windows LSASS vulnerability: MS04-011. |            |                                    |                 |                            |  |

**Alert Status of your network.**

| Alert Status for Online Computers |         |  |             |
|-----------------------------------|---------|--|-------------|
| Computer Type                     | Enabled |  | Not Enabled |
| Desktops/Servers                  | 178     |  | 5           |
| Exchange servers                  | 2       |  | 0           |

Your network has the following vulnerabilities that WORM\_SASSER.B exploits. To ensure the security of your network, please follow the instruction and take necessary actions.

| Vulnerable Computer(s) for WORM_SASSER.B  |                      |                 |                    |                      |
|---|----------------------|-----------------|--------------------|----------------------|
| <input type="button" value="Export"/>   |                      |                 |                    |                      |
| Total: 10 records Page: 35 <span style="font-size: 1.2em;">◀</span> 1 <span style="font-size: 1.2em;">▶</span> of 2 <span style="font-size: 1.2em;">▶▶</span> |                      |                 |                    |                      |
| Risk Level  | Computer             | IP Address      | Computer Group     | # of Vulnerabilities |
| ■■■■■   | Desktop US           | 1.0.333.0       | Desktops (default) | 090                  |
| ■■■■■   | Server TW Taipei 101 | 90.222.223.700  | Desktop (default)  | 999                  |
| ■■■■■   | Desktop-49           | 111.222.033.4   | Desktops (default) | 5643575375           |
| ■■■■■   | Server TW Taipei 101 | 111.292.333.440 | Desktops (default) | 6573575              |
| ■■■■■   | Server TW Taipei 101 | 0.222.333.994   | Desktops (default) | 0                    |

■■■■■ Highly Critical ■■■■■ Critical ■■■■■ Important ■■■■■ Moderate ■■■■■ Low

**FIGURE 6-2. Outbreak Defense screen—Threat Prevention Stage**

### Threat Information

The Threat Information section displays information about virus/malware that are currently on the Internet and could potentially affect your network and Clients. Based on Threat Information, the Outbreak Prevention Policy takes steps to protect the network and Clients while Trend Micro develops a solution (See *Trend Micro*

[Outbreak Prevention Policy](#) on page C-2). Learn more about a threat by clicking **Help > Security Info** to redirect your browser to the Trend Micro Web site.

This section provides the following information:

- **Risk Level:** The level of risk the threat poses to Clients and networks based on the number and severity of virus/malware incident.
- **Automatic Response Details:** Click to view the specific actions Outbreak Defense is using to protect your Clients from the current threat. Click **Disable** to stop the Automatic Response from the server-side and Agents.

---

**Note:** After you disable Outbreak Defense, Trend Micro recommends running Cleanup Now to help rid Clients of Trojans and any running processes related to Trojans or other types of malicious code (see [Computers to Cleanup](#) on page 6-10).

---

## Alert Status for Online Computers

The Alert Status for Online Computers displays a total for the number of Clients both with and without automatic alert enabled. Click the number link under the **Enabled** and **Not Enabled** columns to view more information about specific Clients.

## Vulnerable Computers

The Vulnerable Computers section displays a list of Clients that have vulnerabilities that make them susceptible to the threat displayed in the Threat Information section.

## Threat Protection

The Threat Protection stage of the **Current Status** screen provides information about the Solution Download Status in regard to Trend Micro update components and the Solution Deployment Status in regard to all Agents.

Outbreak Defense > Current Status ?

Prevention
»
Protection
»
Cleanup

As part of the ongoing health of your network, Trend Micro catches any vulnerable computers and provide you with a list of computers that you must manually clean to remove threats. Below you will find a list of computers that require your attention.

Prevention ▲ Red Alert Enabled 02/13/2007 21:05:10

---

Protection for WORM\_SASSER.B 07/03/2007 21:46:17

| Solution Download Status |          |                  |
|--------------------------|----------|------------------|
| Component                | Version  | Status           |
| Virus pattern            | 2.361.00 | Downloaded       |
| Damage cleanup pattern   | 598      | Not released yet |

---

| Solution Deployment Status (Pattern/Engine) |  |            |             |
|---|--|------------|-------------|
| Computer Type                               |  | Up-to-date | Out-of-date |
| Desktops/Servers                            |  | 163        | 20          |
| Exchange server                             |  | 2          | 0           |

**FIGURE 6-3. Outbreak Defense screen—Protection Stage**

### Solution Download Status

Displays a list of components that need to be updated in response to the threat listed in the Threat Information section.

### Solution Deployment Status

Displays the number of Agents that have updated and outdated components. It also provides links to view the Clients with updated or outdated components.

## Threat Cleanup

The Threat Cleanup stage of the **Current Status** screen displays the status of the scan that takes place after the updated components have been deployed. The Threat

Cleanup stage also displays the status of Clients after the scan and lists whether the updates were successful in cleaning or removing threat remnants.

Outbreak Defense > Current Status ?

As part of the ongoing health of your network, Trend Micro catches any vulnerable computers and provide you with a list of computers that you must manually clean to remove threats. Below you will find a list of computers that require your attention.

Prevention ■ Red Alert Enabled 02/13/2007 21:05:10

---

Protection for WORM\_SASSER.B 07/03/2007 21:46:17

---

Cleanup for WORM\_SASSER.B 07/03/2007 21:46:17

*Client/Server/Messaging Security for SMB has scanned your network with the latest threat solution. See a list of computers that are scanned below.*

| Computer Scanning Status for WORM_SASSER.B |                        |                            |
|--|------------------------|----------------------------|
| Computer Type                              | Scan Notification Sent | Scan Notification Not Sent |
| Desktops/Servers                           | 183                    | 0                          |
| Desktops/Servers                           | 2                      | 0                          |

*Client/Server/Messaging Security for SMB has tried to cleanup the computers with the latest components. Please see the results below.*

Computer Cleanup Status for WORM\_SASSER.B

Successful/Attempts: 23/25

Export Total: 10 records Page: 35 1 of 2

| Computer  | Date/Time           | IP Address      | Computer Group     | Threat Name   | Cleanup Result |
|-----------|---------------------|-----------------|--------------------|---------------|----------------|
| Desktop21 | 05/06/2005 hh:mm:ss | 111.222.333.444 | Desktops (default) | WORM_SASSER.B | Unsuccessful   |
| Desktop32 | 05/06/2005 hh:mm:ss | 111.222.333.444 | Desktops (default) | WORM_SASSER.B | Successful     |
| Desktop88 | 05/06/2005 hh:mm:ss | 111.222.333.444 | Desktops 2         | WORM_SASSER.B | Unsuccessful   |
| Desktop88 | 05/06/2005 hh:mm:ss | 111.222.333.444 | Desktops (default) | WORM_SASSER.B | Successful     |
| Desktop88 | 05/06/2005 hh:mm:ss | 111.222.333.444 | Desktops 2         | WORM_SASSER.B | Successful     |

**FIGURE 6-4. Outbreak Defense screen - Cleanup Stage**

**Note:** For a scan to automatically take place after the new components have been deployed, it has to be enabled in the **Outbreak Defense > Settings** screen.

## Computer Scanning Status for

Click the links to display a list of Clients that have either received notification to scan for threats or have yet to receive notification. Clients that are not turned on or that have been disconnected from the network cannot receive notifications.

## Computer Cleanup Status for

This panel displays the results of the Cleanup scan. Click **Export**, to export this information.

## Potential Threat

### Navigation Path: Outbreak Defense > Potential Threat

The **Potential Threat** screen displays information about security risks to your Clients and network. The Security Server gathers threat information by running Vulnerability Assessment and Cleanup services.

**Outbreak Defense > Potential Threat** ?

As part of the ongoing health of your network, Trend Micro catches any vulnerable computers and provide you with a list of computers that you must manually clean to remove threats. Below you will find a list of computers that require your attention.

---

**Vulnerable Computer(s)** 02/13/2007 21:05:10

Your network has the following vulnerabilities that WORM\_SASSER.B exploits. To ensure the security of your network, please follow the instruction and take necessary actions.

[Export](#) [Scan for Vulnerability Now](#) Total: 10 records Page: 35 of 2

| Risk Level | Computer             | IP Address      | Computer Group     | # of Vulnerabilities |
|------------|----------------------|-----------------|--------------------|----------------------|
|            | Desktop US           | 1.0.333.0       | Desktops (default) | 090                  |
|            | Server TW Taipei 101 | 90.222.223.700  | Desktop (default)  | 999                  |
|            | Desktop-49           | 111.222.033.4   | Desktops (default) | 5643575375           |
|            | Server TW Taipei 101 | 111.292.333.440 | Desktops (default) | 6573575              |
|            | Server TW Taipei 101 | 0.222.333.994   | Desktops (default) | 66                   |

Highly Critical Critical Important Moderate Low

---

**Computer(s) to Cleanup** 07/03/2007 21:46:17

Client/Server/Messaging Security for SMB has tried to cleanup the computers with the latest pattern. Please see the results below. To manually cleanup using the new components, click Cleanup Now.

[Export](#) [Cleanup Now](#) Total: 10 records Page: 25 of 2

| Computer    | Date/Time           | IP Address      | Computer Group     | Threat Name        | Action Performed |
|-------------|---------------------|-----------------|--------------------|--------------------|------------------|
| Desktop1771 | 05/06/2005 hh:mm:ss | 1.0.333.0       | Desktops (default) | WORM_SASSER.B      | 090              |
| Desktop21   | 05/06/2005 hh:mm:ss | 90.222.223.700  | Desktop (default)  | WORM_SASSER.B      | 999              |
| Desktop221  | 05/06/2005 hh:mm:ss | 111.222.033.4   | Desktops (default) | Never caught virus | 5643575375       |
| Desktop21   | 05/06/2005 hh:mm:ss | 111.292.333.440 | Desktops (default) | Super Virus        | 6573575          |
| Desktop661  | 05/06/2005 hh:mm:ss | 0.222.333.994   | Desktops (default) | Uncatched virus    | 66               |

**FIGURE 6-5.** Potential Threat screen

Unlike the **Current Threat** screen that only displays information about a current threat, the **Potential Threat** screen displays information about all the threats to your Clients and network that have not been resolved.

## Vulnerable Computers

A vulnerable computer has weaknesses in its operating system or applications. Many threats exploit these vulnerabilities to cause damage or gain unauthorized control. Therefore, vulnerabilities represent risks not only to each individual computer where they are located, but also to the other computers on your network.

The Vulnerable Computers section lists all the Clients on your network that have vulnerabilities discovered since the last vulnerability assessment. You can view the Last updated time in the top-right hand corner of the screen.

The **Potential Threat** screen ranks the Clients according to the risk level that they pose to the network. Risk level is calculated by Trend Micro and represents the relative number and severity of vulnerabilities for each Client.

When you click **Scan for Vulnerabilities Now**, Worry-Free Business Security runs a Vulnerability Assessment. A Vulnerability Assessment checks all the Clients on your network for vulnerabilities and displays the results in the **Potential Threat** screen. Vulnerability Assessments can provide the following information about Clients on your network:

- Identify vulnerabilities according to standard naming conventions. Find out more about the vulnerability and how to resolve it by clicking on the vulnerability name.
- Display the vulnerabilities by Client and IP address. Results include the risk level that the vulnerabilities represent to the Client and to the entire network.
- Report vulnerabilities. Report vulnerabilities according to individual Clients and describe the security risks those Clients present to the overall network.

For additional information, refer to *Trend Micro Vulnerability Assessment* on page C-3.

## Computers to Cleanup

Cleanup runs in the background whenever Agents run Antivirus scans. You do not need to set up scheduled Cleanup scans.

Client/Server Security Agents use Cleanup to protect Clients against Trojan horse programs (or Trojans). To address the threats and nuisances posed by Trojans and other virus/malware, Cleanup does the following:

- Detects and removes live Trojans and other virus/malware applications
- Kills processes that Trojans and other virus/malware applications create
- Repairs system files that Trojans and other virus/malware modify
- Deletes files and applications that Trojans and other virus/malware create

To accomplish these tasks, Cleanup makes use of:

- **Virus Cleanup Engine:** The engine Cleanup uses to scan for and remove Trojans and Trojan processes, worms, and spyware/grayware.
- **Virus Cleanup Pattern:** Used by the Virus Cleanup Engine. This template helps identify Trojans and Trojan processes, worms, and spyware/grayware, so the virus cleanup engine can eliminate them.

Cleanup runs on Clients when:

- Users perform a manual cleanup from the Agent
- Administrators perform Cleanup Now on Clients from the Web console
- Users run a Manual Scan or Clean
- After hot fix or patch deployment
- When the Security Server starts

Because Cleanup runs automatically, you do not need to configure it. Users are not even aware when it is operates because it runs in the background (when Agents are running). However, the Security Server may sometimes notify the user to restart their Client to complete the cleanup. To learn more about how Damage Cleanup works, see [Trend Micro Damage Cleanup Services](#) on page C-2.

## Setting up Outbreak Defense

Use the **Settings** screen to configure Outbreak Defense and Vulnerability Assessment options.

## Outbreak Defense Settings

Worry-Free Business Security initiates Outbreak Defense in response to instructions that it receives in the Outbreak Prevention Policy. The Trend Micro Outbreak Prevention Policy is designed and issued by Trend Micro to give optimal protection to your Clients and network during outbreak conditions. Trend Micro issues the Outbreak Prevention Policy when it observes frequent and severe virus/malware incidents that are actively circulating on the Internet.

By default, the Security Server downloads the Outbreak Prevention Policy from the Trend Micro ActiveUpdate Server every 30 minutes or whenever the Security Server starts up.

During Outbreak Defense, the Security Server enacts the Outbreak Defense Policy and takes action to protect your Clients and network. At such a time, the normal functions of your network will be interrupted by measures like blocked ports and inaccessible directories. You can use the Outbreak Defense Settings to customize the Outbreak Defense for your Clients and network, thus avoiding unexpected consequences from the policies enacted during Outbreak Defense.

### Red Alerts

Several business units have reported about a rapidly spreading virus/malware. As a response, Trend Micro has triggered its 45-minute Red Alert solution process, which involves releasing preventive solutions and scan patterns and sending out relevant notifications. Trend Micro may also send out fix tools and information regarding related vulnerabilities and threats.

### Yellow Alerts

Infection reports are received from several business units as well as support calls confirming scattered instances. An official pattern release (OPR) is automatically pushed to deployment servers and made available for download.

## Recommended Outbreak Defense Settings

The following settings are provided for optimal protection:

**TABLE 6-2. Recommended Outbreak Defense settings**

| Setting   | Recommended Value  |
|---|--|
| Enable Automatic Outbreak Defense for Red Alerts issued by Trend Micro    | Enabled  |
| Disable Red Alerts after  | 2 days   |
| Disable Red Alerts after required components deployed                     | Enabled  |
| Automatic Desktop/Server scans  | Enabled  |
| Enable Automatic Outbreak Defense for Yellow Alerts issued by Trend Micro | Disabled   |
| Disable Yellow Alerts after   | NA   |
| Disable Yellow Alerts after required pattern/engine deployed              | NA   |
| Disable Yellow Alerts after required pattern/engine deployed.             | NA   |
| Automatic Desktop/Server scans  | Enabled  |
| Exceptions  | Ports for the following services will not be blocked during Outbreak Defense Automatic Response: <ul style="list-style-type: none"> <li>• DNS</li> <li>• NetBios</li> <li>• HTTPS (Secure Web server)</li> <li>• HTTP (Web server)</li> <li>• Telnet</li> <li>• SMTP (Simple mail protocol)</li> <li>• FTP (File transfer protocol)</li> <li>• Internet Mail (POP3)</li> </ul> |
| Scheduled Policy Download Settings  | Frequency: Every 30 minutes<br>Source: Trend Micro ActiveUpdate Server   |

## Configuring Outbreak Defense Settings

**Note:** Trend Micro designed Outbreak Defense defaults to provide optimal protection for your Clients and network. Before customizing your Outbreak Defense settings, carefully consider the settings and only modify them when you understand the consequences.

### Navigation Path: Outbreak Defense > Settings > Outbreak Defense tab

Outbreak Defense > Settings ?

Set up your response to vulnerabilities and outbreaks for the entire network.

**Outbreak Defense** | Vulnerability Assessment

**Automatic Outbreak Defense**

Enable Automatic Outbreak Defense for Red Alerts issued by Trend Micro ! i

Disable Red Alerts after:  days

Disable Red Alerts after required component(s) deployed.

Perform automatic virus scan after required component(s) deployed for:

Desktops/Servers

Exchange server

Enable Automatic Outbreak Defense for Yellow Alerts issued by Trend Micro ! i

Disable Yellow Alerts after:  days

Disable Yellow Alerts after required pattern/engine deployed.

Perform automatic virus scan after required component(s) deployed for:

Desktops/Servers

Exchange server

Exceptions

Scheduled Policy Download Settings

**FIGURE 6-6. Outbreak Defense tab of Outbreak Defense Settings screen**

#### To configure the Outbreak Defense settings:

1. Update the following options as required:
  - **Enable Outbreak Defense for Red Alerts issued by Trend Micro:** Outbreak Defense policies stay in effect until you click **Outbreak Defense > Current Status > Disable** or one of the disable settings are met. When the Security Server downloads a new Outbreak Prevention Policy, the old policy stops.
  - **Disable Red Alerts after x days:** The duration for the Outbreak Defense alert.

- Perform automatic virus scan after required components deployed for:
  - Desktops/Servers
- **Yellow Alert settings:** Configure the options for Yellow Alerts. Refer to *Yellow Alerts* on page 6-12 for more information.
- **Exceptions:** The ports that will not be blocked during Outbreak Defense Automatic Response. Refer to *Using Outbreak Defense Exceptions* on page 6-15 to work with Exceptions.

---

**Note:** When adding a new exception, ensure to select **Enable this exception**.

---

- **Scheduled Policy Download Settings:** The settings for periodically downloading updated components.
  - Frequency
  - **Source:** The source of the updates.
    - Trend Micro ActiveUpdate server (default)
    - Intranet location containing a copy of the current file
    - **Other update source:** Any other update source on the Web.

2. Click **Save**.

## Using Outbreak Defense Exceptions

Use Exceptions to Add, Edit or Remove ports from being excluded from blocking.

**Navigation Path:** **Outbreak Defense > Settings > Outbreak Defense tab**

| <input type="checkbox"/> | Description          | Protocol | Port  | Enabled |
|--------------------------|----------------------|----------|-------|---------|
| <input type="checkbox"/> | Web service (HTTP)   |          | 80    | ✓       |
| <input type="checkbox"/> | Send mail (SMTP)     |          | 25    | ✓       |
| <input type="checkbox"/> | Internet mail (POP3) |          | 110   | ✗       |
| <input type="checkbox"/> | File transfer (FTP)  |          | 20-21 | ✓       |
| <input type="checkbox"/> | Telnet               |          | 23    | ✗       |

**FIGURE 6-7.** Exceptions section of Outbreak Defense Settings screen

**To add an exception:**

1. Click the plus (+) icon for the **Exceptions** section.
2. Click **Add**.
3. From the **Outbreak Defense > Settings > Add Exception** screen, update the following options as required:
  - **Enable this exception**
  - **Description:** A brief description that will help identify the exception.
  - **Protocol:** Select the protocol to which the exception must be applied.
  - **Ports:** Type a port range or individual ports for the exception. Separate multiple entries with semicolons (;).
4. Click **Add**.

**To edit an exception:**

1. Click the plus (+) icon for the **Exceptions** section.
2. Select the exception and click **Edit**.
3. Update the options as required.
4. Click **Save**.

**To remove an exception:**

---

**Tip:** Disable an Exception instead of removing.

---

1. Click the plus (+) icon for the **Exceptions** section.
2. Select the exception and click **Remove**.
3. Click **OK** to confirm.

## Configuring Vulnerability Assessment Settings

The Vulnerability Assessment settings determine the frequency and the target of the Vulnerability Prevention scans.

## Navigation Path: Outbreak Defense > Settings > Vulnerability Assessment tab

Outbreak Defense > Settings ?

Set up your response to vulnerabilities and outbreaks for the entire network.

Outbreak Defense **Vulnerability Assessment**

**Schedule**

Enable Scheduled Vulnerability Prevention

Daily

Weekly, every Wednesday

Monthly, on day 01

Start time: 02 00

hh mm

**Target**

All groups

Specified group(s)

Desktops (default)

Desktops 2

Servers

**FIGURE 6-8. Vulnerability Assessment tab of Outbreak Defense Settings screen**

### To configure Vulnerability Assessment frequency:

1. From the **Vulnerability Assessment** tab on the **Outbreak Defense > Settings** screen, update the following options as required:
  - **Enable Scheduled Vulnerability Prevention**
  - **Frequency:** Select from **Daily**, **Weekly**, or **Monthly**. If you select **Weekly** or **Monthly**, set the day of the week or the day of the month.
  - **Start time**
  - **Target**
    - **All groups:** Scans all the Clients that appear in the Group Management Tree on the Security Settings screen.
    - **Specified group(s):** Limit the vulnerability assessment scan to only the selected groups.
2. Click **Save**.



# Configuring Manual and Scheduled Scans

This chapter describes how to use Manual and Scheduled scans to protect your network and Clients from virus/malware and other threats.

The topics discussed in this chapter include:

- *Worry-Free Business Security Scans* on page 7-2
- *Scanning Clients* on page 7-3

## Worry-Free Business Security Scans

Worry-Free Business Security provides three types of scans to protect your Clients from Internet threats: Manual Scan, Scheduled Scan, and Real-time Scan. Each scan has a different purpose and use, but all are configured approximately the same way. This chapter discusses Manual and Scheduled Scans.

### Manual Scan

Manual Scan is an on-demand scan. Manual Scanning eliminates threats from files on Clients. This scan also removes old infections, if any, to minimize reinfection. During a Manual Scan, Agents take actions against threats according to the actions set by the Administrator (or User). To stop the scan, click **Stop Scanning** when the scan is in progress.

---

**Note:** The amount of time it takes to scan depends on the Client's hardware resources and the number of files to be scanned.

---

Configure the Antivirus options for Manual Scans. To configure a Manual Scan, click **Scans > Manual Scan**. Refer to *Configuring Scan Options for Groups* on page 7-3 for more information.

### Scheduled Scan

A Scheduled Scan is similar to Manual Scan except that it scans all files at the configured time and frequency. Use Scheduled Scans to automate routine scans on your Clients and improve the efficiency of threat management.

To configure a Scheduled scan, click **Scans > Scheduled Scan**. Refer to *Scheduling Scans* on page 7-8 for more information.

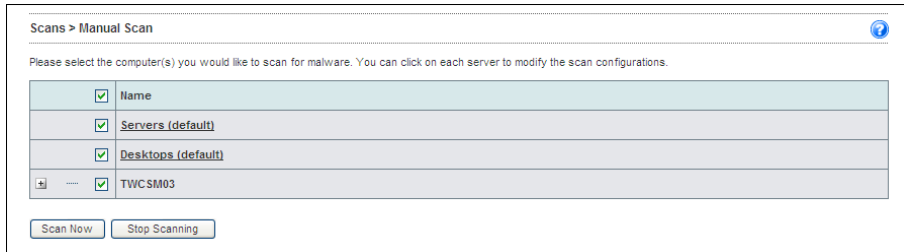
### Real-time Scan

Real-time Scan is a persistent and ongoing scan. Each time a file is received, opened, downloaded, copied, or modified, Real-time Scan scans the file for threats. Refer to *Configuring Real-time Scan* on page 5-5 for more information..

## Scanning Clients

The following section explains how to configure both Manual and Schedule Scans for Clients. For instructions to schedule a Scheduled Scan, refer to [Scheduling Scans](#) on page 7-8.

### Navigation Path: Scans > Manual Scan or Scheduled Scan



**FIGURE 7-1. Manual Scan screen**

#### To configure Manual or Scheduled Scans for Clients:

1. From the **Manual Scan** or **Scheduled Scan** screen, select the groups to scan.
2. Set the scanning options for a group by clicking on the group name. Refer to [Configuring Scan Options for Groups](#) on page 7-3.
3. For Scheduled Scans, update the schedule on the **Schedule** tab. Refer to [Scheduling Scans](#) on page 7-8.
4. Click **Scan Now** or **Save**.

## Configuring Scan Options for Groups

Configuring Scan Options for Groups involves setting the Target (files to scan) and the Action (action for detected threats).

## Navigation Path: Scans > Manual Scan or Scheduled Scan > Click a group

Scans > Manual Scan > Desktops (default): Antivirus/Anti-spyware

**Target**    **Action**

All scannable files  
 IntelliScan: uses "true file type" identification [?](#)  
 Scan files with the following extensions (use commas to separate entries)

Scan mapped drives and shared folders on the network  
 Scan compressed files: Up to  compression layers

**Exclusions**

Enable Exclusions

Do not scan the following directories:

Do not scan the directories where Trend Micro products are installed.

Enter the directory path (E.g. c:\temp\ExcludeDir)

Do not scan the following files:

Enter the file name or the file name with full path  
(E.g. ExcludeDoc.hlp, c:\temp\excldir\ExcludeDoc.hlp)

Do not scan files with the following extensions:

Select file extension from the list:

Selected extension(s):

Or type the extension below:

**Advanced Settings**

For Antivirus Only

Enable IntelliTrap [?](#)  
 Scan boot area

For Anti-spyware Only

Add certain types of Spyware/Grayware applications or files to the approved list to exempt them from scanning.  
 This applies to all types of scans.

[Modify Spyware/Grayware Approved List](#)

### To configure the scan options:

- From the group's scanning options screen, update the following as required:
  - Files to scan

- **All scannable files:** Only encrypted or password-protected files are excluded.
  - **IntelliScan:** Scans files based on true-file type. Refer to *Trend Micro IntelliScan* on page C-4 for more information.
  - **Scan files with the following extensions:** Worry-Free Business Security will scan files with the selected extensions. Separate multiple entries with commas (,).
  - **Scan mapped drives and shared folders on the network**
  - **Scan compressed files:** Configure the number of layers to scan.
  - **Exclusions:** Exclude specific files, folders, or files with certain extensions from being scanned.
    - **Enable Exclusions**
    - **Do not scan the directories where Trend Micro products are installed**
    - **Folder exclusions:** Type the name of the folder to exclude from the scan. Click **Add**. To remove a folder, select the folder and click **Delete**.
    - **File exclusions:** Type the name of the file to exclude from the scan. Click **Add**. To remove a file, select the file and click **Delete**.
    - **Extension exclusions:** Type the name of the extension to exclude from the scan. Click **Add**. To remove an extension, select the extension and click **Delete**.
  - **Advanced Settings**
    - **Enable IntelliTrap** (for antivirus): IntelliTrap detects malicious code such as bots in compressed files. Refer to *Trend Micro IntelliTrap* on page C-5 for more information.
    - **Scan boot area** (for antivirus): The boot sector contains the data used by Clients to load and initialize the operating system. A boot sector virus infects the boot sector of a partition or a disk.
    - **Spyware/Grayware Approved List** (for anti-spyware): This list contains details of the approved spyware/grayware applications. Click the link to update the list. Refer to *Editing the Spyware/Grayware Approved List* on page 7-6 for more information.
2. From the **Action** tab, specify how Worry-Free Business Security should handle detected threats:

- **CPU Usage:** The period of time Security Server waits between scanning each file affects CPU usage. Select a lower CPU usage level to increase the wait time between file scans, which frees up the CPU to perform other tasks.
- Action for Virus Detections
  - **ActiveAction:** Use Trend Micro preconfigured actions for threats. Refer to *Trend Micro ActiveAction* on page C-4 for more information.
  - **Same action for all threats:** Select from Pass, Delete, Rename, Quarantine, or Clean. If you select Clean, set the action for an uncleanable threat.
  - **Customized action for the following detected threats:** Select from Pass, Delete, Rename, Quarantine, or Clean for each type of threat. If you select Clean, set the action for an uncleanable threat.
  - **Backup detected file before cleaning:** Worry-Free Business Security makes a backup of the threat before cleaning. The backed-up file is encrypted and stored in the following directory on the Client:  
C:\Program Files\Trend Micro\Client Server Security Agent\Backup  
  
To decrypt the file, refer to *Restore Encrypted Virus* on page 13-8
- Action for Spyware/Grayware Detections
  - **Clean:** When cleaning spyware/grayware, Worry-Free Business Security could delete related registry entries, files, cookies, and shortcuts. Processes related to the spyware/grayware could also be terminated.
  - **Pass:** Only logs the infection for further assessment. Refer to *Logs on page 9-2* for more information.

### 3. Click **Save**.

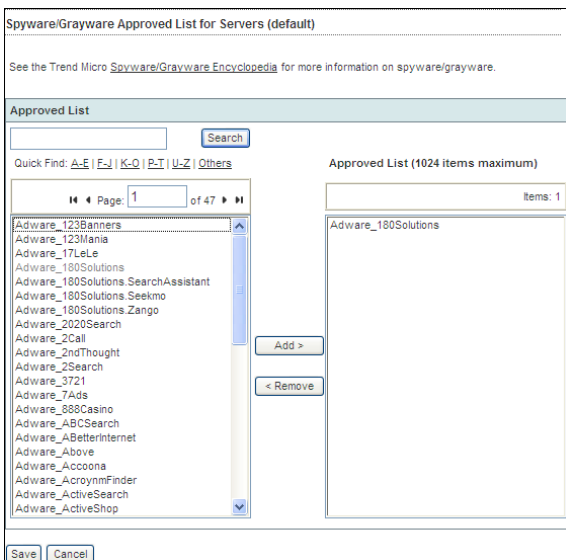
Additionally, configure who receives notifications when an event occurs. Refer to *About Notifications* on page 10-2.

## Editing the Spyware/Grayware Approved List

The Spyware/Grayware Approved List determines which spyware or grayware applications users can use. Only Administrators can update the list. Refer to *Spyware/Grayware Types* on page E-1 to learn about the different kinds of spyware.

**Note:** For a particular group, the same list is used for Real-Time, Scheduled, and Manual Scans.

**Navigation Path:** Scans > Manual Scan or Scheduled Scan > Click a group > Advanced Settings



**FIGURE 7-2.** Spyware/Grayware Approved List screen

**To update the Spyware/Grayware Approved List:**

1. From the Advanced Setting section, click **Modify Spyware/Grayware Approved List**.
2. From the **Spyware/Grayware Approved List** screen, update the following as required:
  - **Left pane:** Recognized spyware or grayware applications. Use **Search** or the **Quick Find** links to locate the spyware/grayware application that you want to allow.

---

**Note:** Applications are sorted by type of the application and then application name (SpywareType\_ApplicationName).

---

- **Right pane:** Approved spyware or grayware applications.
  - **Add>:** Select the application name in the left pane and click **Add>**. To select multiple applications, press CTRL while clicking the application names.
  - **<Remove**
3. Click **Save**.

## Scheduling Scans

Schedule scans to periodically scan Clients for threats.

---

**Tip:** Trend Micro recommends that you not schedule a scan and an update to run at the same time. This may cause the Scheduled Scan to stop unexpectedly. Similarly, if you begin a Manual Scan when a Scheduled Scan is running, the Scheduled Scan will be interrupted. The Scheduled Scan aborts, but runs again according to its schedule.

---

---

**Note:** To disable Scheduled Scan, clear all options for the specific group and click **Save**.

---

## Navigation Path: Scans > Scheduled Scan > Schedule tab

The screenshot shows the 'Scheduled Scan' configuration window with the 'Schedule' tab selected. It is divided into two sections: 'Servers (default)' and 'Desktops (default)'. Each section has three radio button options: 'Daily', 'Weekly, every' (with a day dropdown), and 'Monthly, on day' (with a day dropdown). Below these is a 'Start time' field with hour and minute dropdowns. A 'Save' button is located at the bottom left.

**FIGURE 7-3. Scheduled Scan screen**

### To schedule a scan:

1. Before scheduling a scan, configure the settings for the scan. Refer to [Configuring Scan Options for Groups](#) on page 7-3 for more information.
2. From the **Scheduled** tab, update the following options for each group as required:
  - **Daily:** The Scheduled Scan runs every day at the **Start time**.
  - **Weekly, every:** The Scheduled Scan runs once a week on the specified day at the **Start time**.
  - **Monthly, on day:** The Scheduled Scan runs once a month on the specified day at the **Start time**. If you select 31 days and the month has only 30 days, Worry-Free Business Security will not scan the Clients that month.
  - **Start time:** The time the Scheduled Scan should start.
3. Click **Save**.

Additionally, configure who receives notifications when an event occurs. Refer to [About Notifications](#) on page 10-2.

---

**Tip:** Trend Micro recommends scheduling scans at regular intervals for optimal protection.

---

---

# Updating Components

This chapter explains how to use and configure Manual and Scheduled Updates. The topics discussed in this chapter include:

- *Updating Components* on page 8-2
- *Updatable Components* on page 8-3
- *Update Sources* on page 8-6
- *Manual and Scheduled Updates* on page 8-10
- *Rolling Back or Synchronizing Components* on page 8-13

## Updating Components

Worry-Free Business Security makes upgrading to the latest components easy by having Agents automatically receive updated components from the Security Server.

Worry-Free Business Security downloads components from the Trend Micro ActiveUpdate Server (see *About ActiveUpdate* on page 8-3 for more information):

- When you install the product for the first time, all of components for the Security Server and Agents are immediately updated from the Trend Micro ActiveUpdate Server.
- Whenever the Worry-Free Business Security master service is started, ActiveUpdate server is checked to see if updates are available.
- By default, Scheduled Updates run every hour to update the Security Server.
- By default, Client/Server Security Agent runs a Scheduled update every eight hours.

---

**Tip:** To ensure that Client/Server Security Agents stay up-to-date even when not connected to the Security Server, set Client/Server Security Agents to receive updates from an alternative source (*Configuring an Update Source* on page 8-7). This is useful for end users who are often away from the office and disconnected from the local network.

---

Trend Micro recommended settings for component updates provide reasonable protection to small and medium-sized business. If necessary, you can run Manual updates or modify the Scheduled updates.

## About ActiveUpdate

ActiveUpdate is a function common to many Trend Micro products. Connected to the Trend Micro update Web site, ActiveUpdate provides the latest downloads of virus pattern files, scan engines, and program files through the Internet. ActiveUpdate does not interrupt network services or require you to restart Clients.

### Incremental updates of the pattern files

ActiveUpdate supports incremental updates of pattern files. Rather than downloading the entire pattern file each time, ActiveUpdate can download only the portion of the file that is new, and append it to the existing pattern file. This efficient update method can substantially reduce the bandwidth needed to update your antivirus software.

### Using ActiveUpdate with Worry-Free Business Security

Click Trend Micro's ActiveUpdate Server from the **Updates > Update Source** screen to set the Security Server to use the ActiveUpdate server as a source for manual and scheduled component updates. When it is time for a component update, the Security Server polls the ActiveUpdate server directly. If a new component is available for download, the Security Server downloads the component from the ActiveUpdate server.

## Updatable Components

To ensure Clients stay protected from the latest threats, update the Worry-Free Business Security components regularly.

Configure the Security Server to download Worry-Free Business Security components from the ActiveUpdate server. The ActiveUpdate server provides updated components such as the virus pattern files, scan engines, and program files. After the server downloads any available updates, it automatically deploys the updated components to the Agents.

Worry-Free Business Security provides two methods for updating your components:

- Update your components manually, see *Manually Updating Components* on page 8-11.
- Update your components based on a schedule, see *Scheduling Component Updates* on page 8-12.

If you use a proxy server to connect to the Internet, ensure that you properly configure the proxy settings to download updates successfully. For more information, see [Internet Proxy Options](#) on page 11-2.

**TABLE 8-1. Updatable Components**

| Component             | Sub-component   |
|-----------------------|---|
| Antivirus             | <ul style="list-style-type: none"> <li>• Virus Pattern</li> <li>• Virus Scan Engine 32-bit</li> <li>• Virus Scan Engine 64-bit</li> <li>• Virus Cleanup Template</li> <li>• Virus Cleanup Engine 32-bit</li> <li>• Virus Cleanup Engine 64-bit</li> <li>• IntelliTrap Exception Pattern</li> <li>• IntelliTrap Pattern</li> </ul> |
| Anti-spyware          | <ul style="list-style-type: none"> <li>• Spyware Scan Engine 32-bit</li> <li>• Spyware Scan Engine 64-bit</li> <li>• Spyware Pattern</li> <li>• Spyware Active-monitoring Pattern</li> </ul>  |
| Anti-spam             | <ul style="list-style-type: none"> <li>• Anti-spam Pattern</li> <li>• Anti-spam Engine 32-bit</li> <li>• Anti-spam Engine 64-bit</li> </ul>   |
| Outbreak Defense      | <ul style="list-style-type: none"> <li>• Vulnerability Pattern</li> </ul>   |
| Network Virus         | <ul style="list-style-type: none"> <li>• Common Firewall Pattern</li> <li>• Common Firewall Engine 32-bit</li> <li>• Common Firewall Engine 64-bit</li> <li>• TDI Driver 32-bit</li> <li>• TDI Driver 64-bit</li> <li>• WFP Driver 32-bit</li> <li>• WFP Driver 64-bit</li> </ul>   |
| Web Threat Protection | <ul style="list-style-type: none"> <li>• URL Filtering Engine 32-bit</li> <li>• URL Filtering Engine 64-bit</li> </ul>  |
| Behavior Monitoring   | <ul style="list-style-type: none"> <li>• Behavior Monitor Core Drivers 32-bit</li> <li>• Behavior Monitor Core Service 32-bit</li> <li>• Policy Enforcement Pattern</li> <li>• White Listing Pattern</li> <li>• Behavior Monitor Configuration Pattern</li> </ul>   |

Refer to [About Components](#) on page 1-16 for detailed information about each component.

## Default Update Times

By default, Worry-Free Business Security checks for updates and downloads components, if necessary, from the Trend Micro ActiveUpdate Server under the following circumstances:

- When you install the product for the first time, all the components for the Security Server and Agents are immediately updated from the Trend Micro ActiveUpdate Server.
- Whenever the Worry-Free Business Security master service is started, the Security Server updates the Outbreak Defense policy.
- By default, Scheduled Updates run every hour to update the Security Server.
- To ensure that Agents stay updated, Client/Server Security Agent runs a scheduled update every 8 hours.

The Trend Micro recommended settings for component updates provide reasonable protection to small- and medium-sized business. If necessary, you can run Manual updates or modify the Scheduled updates.

Generally, Trend Micro updates the scan engine or program only during the release of a new Worry-Free Business Security version. However, Trend Micro releases pattern files frequently.

## Updating the Security Server

Worry-Free Business Security automatically performs the following updates:

- When you install the product for the first time, all components for the Security Server and Clients are immediately updated from the Trend Micro ActiveUpdate server.
- Whenever the Worry-Free Business Security starts, the Security Server updates the components and the Outbreak Defense policy.
- By default, Scheduled Updates run every hour.
- To ensure that Clients stay up-to-date, Agents run a scheduled update every 8 hours.

### **To configure Trend Micro Security Server to perform updates:**

1. Select an update source. Refer to *Update Sources* on page 8-6.

2. Configure the Trend Micro Security Server for manual or scheduled updates. Refer to *Manual and Scheduled Updates* on page 8-10.
3. Use **Client Privileges** to configure update options for Clients running the Client/Server Security Agent and/or the . Refer to *Client Privileges* on page 5-25.

## Update Sources

When choosing the Agent update locations, consider the bandwidth of the sections that are between Clients and the update sources. The following table describes different component update options and recommends when to use them:

**TABLE 8-2. Update Source options**

| Update Option  | Description   | Recommendation  |
|--|---|---|
| ActiveUpdate server ><br>Trend Micro Security Server ><br>Clients                    | The Trend Micro Security Server receives updated components from the ActiveUpdate server (or other update source) and deploys them directly to Clients.   | Use this method if there are <b>no</b> sections of your network between the Trend Micro Security Server and Clients you identify as "low-bandwidth".  |
| ActiveUpdate server ><br>Trend Micro Security Server ><br>Update Agents ><br>Clients | The Trend Micro Security Server receives updated components from the ActiveUpdate server (or other update source) and deploys them directly to Update Agents, which deploy the components to Clients. | Use this method to balance the traffic load on your network if there are sections of your network between the Trend Micro Security Server and Clients you identify as "low-bandwidth".  |
| ActiveUpdate server ><br>Update Agents ><br>Clients                                  | Update Agents receive updated components directly from the ActiveUpdate server (or another Update Agent) and deploy them to Clients.  | Use this method only if you are experiencing problems updating Update Agents from the Trend Micro Security Server or from other Update Agents. Under most circumstances, Update Agents receive updates faster from the Trend Micro Security Server or from other Update Agents than from an external update source. |

## Configuring an Update Source

**Navigation Path:** Updates > Source

Updates > Source

When choosing the location from which to update components, consider the bandwidth of the sections of your network that are between clients and the update source.

Server Security Agents

Download Updates From

Trend Micro ActiveUpdate Server  
(http://cm35-p.activeupdate.trendmicro.com/activeupdate/)

Intranet location containing a copy of the current file  
UNC path:   
For example: \\tw-server/download  
User name:   
Password:

Alternate update source  
URL:

Save

**FIGURE 8-1.** Update Source screen

### To configure an update source for the Security Server:

- From the **Source** screen, update the following options as required:
  - Trend Micro ActiveUpdate Server:** Trend Micro ActiveUpdate Server is the Trend Micro default setting for the download source. Trend Micro uploads new components to the ActiveUpdate Server as soon as they are available. Select the ActiveUpdate server as a source if you require frequent and timely updates.

---

**Note:** If you define a source other than the Trend Micro ActiveUpdate Server for receiving updates, then all servers receiving updates must have access to that source.

---

- Intranet location containing a copy of the current file:** Download your components from an Intranet source that receives updated components. Type the Universal Naming Convention (UNC) path of another server on your network, and set up a directory on that target server as a shared folder

available to all servers receiving the updates (for example, \\Web\ActiveUpdate).

- **Alternate update source:** Download your components from an Internet or other source. Make the target HTTP virtual directory (Web share) available to all servers receiving the updates.

2. Click **Save**.

## Using Update Agents

If you identify sections of your network between Clients and the Trend Micro Security Server as “low-bandwidth” or “heavy traffic”, you can specify Agents to act as update sources (Update Agents) for other Agents. This helps distribute the burden of deploying components to all Agents.

For example, if your network is segmented by location and the network link between segments experiences a heavy traffic load, Trend Micro recommends allowing at least one Agent on each segment to act as an Update Agent.

**Navigation Path:** [Updates](#) > [Source](#) > [Security Agents tab](#)

### To allow Agents to act as Update Agents:

1. From the **Security Agents** tab on the **Source** screen, click **Add** in the **Assign Update Agents** section.
2. From the **Select Security Agents** list box, select one or more Agents to act as Update Agents.
3. Click **Save**.

To remove an Update Agent, select the check box corresponding to the **Computer Name** and click **Remove**.

---

**Note:** Unless specified in the Alternative Update Source section, all Update Agents receive their updates from the Trend Micro Security Server.

---

### To allow Agents to get their updates from an alternative update source:

1. From the **Security Agents** tab on the **Source** screen, update the following options as required:

- **Enable Alternative Update Sources**
- **Always update from Security Server for Update Agents:** This is an optional step to ensure Agents receive their updates only from the Security Server.

---

**Note:** If this option is selected, the Update Agents will download updates from the Trend Micro Security Server even if their IP address falls within one of the ranges specified in the **Add an Alternative Update Source** screen. For this option to work, **Enable Alternative Update Sources** must be selected.

---

2. Click **Save**.

**To add alternative update sources:**

1. From the **Security Agents** tab on the **Source** screen, click **Add** in the **Alternative Update Sources** section.
2. Update the following options as required:
  - **IP from** and **IP to:** Clients with IP addresses within this range will receive their updates from the specified update source.

---

**Note:** To specify a single Client/Server Security Agent, enter the Client/Server Security Agent's IP address in both the **IP from** and **IP to** fields.

---

- Update source
    - **Update Agent:** If the drop-down list is not available, no Update Agents have been configured.
    - **Specified:** The path to an Update Agent or an ActiveUpdate server.
3. Click **Save**.

To remove an alternative update source, select the check box corresponding to the **IP Range** and click **Remove**.

---

**Note:** Client/Server Security Agents that are not specified will automatically receive updates from the Trend Micro Security Server.

---

## Manual and Scheduled Updates

Worry-Free Business Security offers two methods to update the different components.

### Manual Updates

Trend Micro recommends updating the server manually immediately after deploying a Client/Server Security Agent and whenever there is a virus/malware outbreak.

### Scheduled Updates

Configure the Trend Micro Security Server to regularly check its update source and automatically download any available updates. Because Agents normally get updates from the Trend Micro Security Server, using automatic scheduled update is an easy and effective way of ensuring that your protection against virus/malware is always current. Setting Scheduled updates is similar to setting Manual updates, both procedures will be combined here. An additional section for setting an update time will follow.

---

**Tip:** Trend Micro recommends frequently updating components.

---

## Manually Updating Components

Navigation Path: Updates > Manual Update

Updates > Manual Update

Select the components you would like to update then click on Update Now.

| <input checked="" type="checkbox"/> | Components                        | Current Version | Last Update         |
|-------------------------------------|-----------------------------------|-----------------|---------------------|
| <input checked="" type="checkbox"/> | Antivirus                         |                 |                     |
| <input checked="" type="checkbox"/> | AntiSpyware                       |                 |                     |
| <input checked="" type="checkbox"/> | Spyware scan engine 32-bit        | 6.1.2010        | 11/30/2007 15:52:00 |
| <input checked="" type="checkbox"/> | Spyware scan engine 64-bit        | 6.1.2010        | 11/30/2007 15:52:08 |
| <input checked="" type="checkbox"/> | Spyware pattern                   | 5.53            | 11/28/2007 16:45:09 |
| <input checked="" type="checkbox"/> | Spyware active monitoring pattern | 0.577.00        | 11/29/2007 14:02:29 |
| <input checked="" type="checkbox"/> | Anti-spam                         |                 |                     |
| <input checked="" type="checkbox"/> | Outbreak Defense                  |                 |                     |
| <input checked="" type="checkbox"/> | Network Virus                     |                 |                     |
| <input checked="" type="checkbox"/> | Common firewall pattern           | 10265           | 11/28/2007 16:51:14 |
| <input checked="" type="checkbox"/> | Common firewall engine 32-bit     | 0.0.0           | N/A                 |
| <input type="checkbox"/>            | Common firewall engine 64-bit     | 0.0.0           | N/A                 |
| <input type="checkbox"/>            | TDI driver 32-bit                 | 0.0.0           | N/A                 |
| <input type="checkbox"/>            | TDI driver 64-bit                 | 0.0.0           | N/A                 |
| <input checked="" type="checkbox"/> | WFP driver 32-bit                 | 0.0.0           | N/A                 |
| <input type="checkbox"/>            | WFP driver 64-bit                 | 0.0.0           | N/A                 |

Update Now

**FIGURE 8-2. Manual Update screen**

**To manually update components:**

- From the **Manual Update** screen, update the following options as required:
  - Components:** To select all components, select the Components check box. To select individual components, click  to display the components to update and select the corresponding check boxes. For information about each component, refer to *Updateable Components* on page 1-26.
- Click **Update Now** or **Save**. If scheduling updates, refer to *Scheduling Component Updates* on page 8-12.

**Note:** After the server downloads the updated components, it then automatically deploys the components to Agents.

## Scheduling Component Updates

Schedule updates to automatically receive the latest components to combat threats.

**Tip:** Avoid scheduling a scan and an update to run at the same time. This may cause the Scheduled Scan to stop unexpectedly.

### Navigation Path: Updates > Scheduled Scan > Schedule tab

The screenshot shows the 'Updates > Scheduled Update' window. It has two tabs: 'Components' and 'Schedule'. The 'Schedule' tab is active. Under 'Components', there is a 'Components' checkbox. The 'Schedule' section has four radio button options: 'Hourly' (selected), 'Daily', 'Weekly, every' (with a dropdown menu showing 'Sunday'), and 'Monthly, on day' (with a dropdown menu showing '1'). Below these is a 'Start time' field set to '12:00 (hh:mm)' and an 'update for period of' field set to '2 hour(s)'. A 'Save' button is located at the bottom left of the window.

**FIGURE 8-3. Scheduled Update screen**

#### To schedule an update:

- From the **Components** tab on the **Scheduled Update** screen, update the following as required:
  - Components:** To select all components, select the Components check box. To select individual components, click to display the components to update and select the corresponding check boxes. For information about each component, refer to *Updateable Components* on page 1-26.
- From the **Scheduled Update** tab, update the following options as required:
  - Hourly:** Checks for updates every hour.
  - Daily:** The Scheduled Update runs every day at the **Start time**.
  - Weekly, every:** The Scheduled Update runs once a week on the specified day at the **Start time**.
  - Monthly, on day:** The Scheduled Update runs once a month on the specified day beginning at the **Start time**.

- **Start time:** The time the Scheduled Update should start.
- **Update period:** The period within which updates can run.

3. Click **Save**.

---

**Tip:** During times of virus/malware outbreaks, Trend Micro responds quickly to update virus pattern files (updates can be issued more than once each week). The scan engine and other components are also updated regularly. Trend Micro recommends updating your components daily, or even more frequently in times of virus/malware outbreaks, to help ensure the Agent has the most up-to-date components.

---

## Rolling Back or Synchronizing Components

Rolling back refers to reverting to the previous version of a virus pattern file or scan engine. If the pattern file or scan engine that you are using is not functioning properly, roll back these components to their previous versions.

Synchronizing refers to deploying the updated components to all Agents.

---

**Note:** You can roll back only the virus pattern file and scan engine. No other components can be rolled back.

---

The Agents use the following scan engines:

- Virus scan engine 32-bit
- Virus scan engine 64-bit

You need to roll back these types of scan engines separately. The rollback procedures for both types of scan engines are the same. The Trend Micro Security Server retains only the current and the previous versions of the scan engine and the last five pattern files.

## Navigation Path: Updates > Rollback

| Updates > Rollback   |                 |                     |                  |                     |  |   |
|--|-----------------|---------------------|------------------|---------------------|--|---|
| Synchronize security server and security agent component or roll back component to previous version. |                 |                     |                  |                     |  |   |
| Component Status   |                 |                     |                  |                     |  |   |
| Component  | Current Version | Last Update         | Previous Verison | Last Update         | Synchronize                                | Rollback One Version                    |
| Virus pattern  | 2.361.00        | 09/09/2005 hh:mm:ss | 2.360.00         | 09/09/2005 hh:mm:ss | <input type="button" value="Synchronize"/> | <input type="button" value="Rollback"/> |
| Virus scan engine 32-bit   | 7.510.1002      | 09/09/2005 hh:mm:ss | n/a              | n/a                 | <input type="button" value="Synchronize"/> | <input type="button" value="Rollback"/> |
| Virus scan engine 64-bit   | 7.510.1002      | 09/09/2005 hh:mm:ss | n/a              | n/a                 | <input type="button" value="Synchronize"/> | <input type="button" value="Rollback"/> |

**FIGURE 8-4. Rollback screen**

### To roll back or synchronize pattern files or scan engines:

From the **Rollback** screen, select the following options as required:

- **Rollback:** reverts the Security Server and Agent components to the previous version.
- **Synchronize:** deploys the updated components to Agents.

---

# Viewing and Interpreting Logs and Reports

This chapter describes how to use logs and reports to monitor your system and analyze your protection. The topics discussed in this chapter include:

- *Logs* on page 9-2
- *Reports* on page 9-3
- *Managing Logs and Reports* on page 9-9
- *Generating Reports* on page 9-6
- *Managing Logs and Reports* on page 9-9

## Logs

Worry-Free Business Security keeps comprehensive logs about virus/malware and spyware/grayware incidents, events, and updates. Use these logs to assess your organization's protection policies and to identify Clients that are at a higher risk of infection. Also, use these logs to verify that updates have been deployed successfully.

---

**Note:** Use spreadsheet applications, such as Microsoft Excel, to view CSV log files.

---

Worry-Free Business Security maintains logs under the following categories:

- Management console event logs
- Desktop/Server logs

**TABLE 9-1. Log Type and Content**

| <b>Type</b> (event or item that generated the log entry) | <b>Content</b> (type of log to obtain content from)   |
|--|---|
| Management console events                                | <ul style="list-style-type: none"> <li>• Manual Scan</li> <li>• Update</li> <li>• Outbreak Defense events</li> <li>• Console events</li> </ul>  |
| Desktop/Server   | <ul style="list-style-type: none"> <li>• Virus logs               <ul style="list-style-type: none"> <li>• Manual Scan</li> <li>• Real-time Scan</li> <li>• Scheduled scan</li> <li>• Cleanup</li> </ul> </li> <li>• Spyware logs               <ul style="list-style-type: none"> <li>• Manual Scan</li> <li>• Real-time Scan</li> <li>• Scheduled scan</li> </ul> </li> <li>• URL violation logs</li> <li>• Behavior monitoring logs</li> <li>• Update logs</li> <li>• Network virus logs</li> <li>• Outbreak Defense logs</li> <li>• Event logs</li> </ul> |

## Reports

This section explains how to configure both one-time and scheduled reports.

### One-Time Reports

Generate One-time Reports to view log information in an organized and graphically appealing format.

### Scheduled Reports

Contents of Scheduled Reports are similar to One-Time Reports, but are generated at the specified time and frequency. To generate scheduled reports, select the contents of the report and save it as a template. At the specified time and frequency, Worry-Free Business Security uses the template to generate the report.

## Interpreting Reports

Worry-Free Business Security reports contain the following information. The information displayed could vary depending on the options selected.

**TABLE 9-2. Contents of a report**

| Report Item | Description   |
|-------------|---|
| Antivirus   | <p><b>Desktop/Servers Virus Summary</b><br/>Virus reports show detailed information about the numbers and types of virus/malware that the scan engine detected and the actions it took against them. The report also lists the Top virus/malware names. Click the names of the virus/malware to open a new Web browser page and redirect it to the Trend Micro virus encyclopedia to learn more about that virus/malware.</p> <p><b>Top 5 Desktop/Servers with Virus Detections</b><br/>Displays the top five desktops or servers reporting virus/malware detections. Observing frequent virus/malware incidents on the same Client might indicate that a Client represents a high security risk that might require further investigation</p> |

**TABLE 9-2. Contents of a report**

| Report Item              | Description  |
|--------------------------|--|
| Anti-spyware             | <p><b>Desktop/Servers Spyware/Grayware Summary</b><br/>The spyware/grayware report shows detailed information about the spyware/grayware threats detected on Clients, including the number of detections and the actions that Worry-Free Business Security took against them. The report includes a pie chart that shows the percentage of each anti-spyware scan action that has been performed.</p> <p><b>Top 5 Desktop/Servers with Spyware/Grayware Detections</b><br/>The report also shows the top five spyware/grayware threats detected and the five desktops/servers with the highest number of spyware/grayware detected. To learn more about the spyware/grayware threats that have been detected, click the spyware/grayware names. A new Web browser page opens and displays related information on the spyware/grayware on the Trend Micro Web site.</p> |
| Outbreak Defense History | <p><b>Outbreak Defense History</b><br/>Displays recent outbreaks, the severity of the outbreaks, and identifies the virus/malware causing the outbreak and how it was delivered (by email or file).</p>  |
| Network Virus            | <p><b>Top 10 Network Viruses Detected</b><br/>Lists the 10 network viruses most frequently detected by the common firewall driver. Click the names of the viruses to open a new Web browser page and redirect it to the Trend Micro virus encyclopedia to learn more about that virus/malware.</p> <p><b>Top 10 Computers Attacked</b><br/>List the Clients on your network that report the most frequent virus/malware incidents.</p>   |
| Web Threat Protection    | <p><b>Top 10 Computers Violating Web Threat Protection Policies</b><br/>Lists the top 10 Clients that have violated Web Threat Protection policies.</p>  |
| Behavior Monitoring      | <p><b>Top 5 Programs Violating Behavior Monitoring Policies</b><br/>Lists the top five programs violating Behavior Monitoring policies.</p> <p><b>Top 10 Computers Violating Behavior Monitoring Policies</b><br/>Lists the top 10 Clients that have violated Behavior Monitoring policies.</p>  |

## Using Log Query

Perform log queries to gather information from the log database. You can use the **Log Query** screen to set up and run your queries. Results can be exported in the CSV file format or printed.

---

**Note:**

---

### Navigation Path: Reports > Log Query

The screenshot shows the 'Reports > Log Query' interface. It features three main sections: 'Time Range', 'Type', and 'Content'. In the 'Time Range' section, the 'Last 7 days' option is selected. The 'Specified range' section includes 'From' and 'To' fields with date pickers and time dropdowns. The 'Type' section has 'Management console events' selected. The 'Content' section has 'Manual scan' selected. A 'Display Logs' button is located at the bottom of the form.

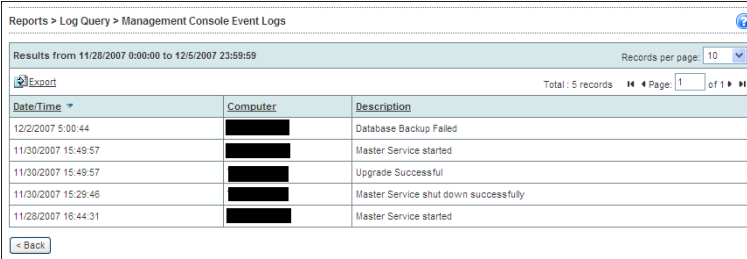
**FIGURE 9-1.** Default Log Query screen

#### To view logs:

- From the **Log Query** screen, update the following options as required:
  - Time Range**
    - Preconfigured range**
    - Specified range:** To limit the query to certain dates.
  - Type:** Refer to Table 9-1 on page 9-2 to view the contents of each log type.
    - Management console events**
    - Desktop/Server**

- **Content:** The available options depend on the **Type** of log.
2. Click **Display Logs**.

To save the log as a comma-separated value (CSV) data file, click **Export**. Use a spreadsheet application to view CSV files.



The screenshot shows a web interface for log queries. At the top, it says "Reports > Log Query > Management Console Event Logs". Below this, there's a search bar with "Results from 11/28/2007 0:00:00 to 12/5/2007 23:59:59" and a "Records per page: 10" dropdown. An "Export" button is visible. Below the search bar is a table with three columns: "Date/Time", "Computer", and "Description". The table contains five rows of log entries. At the bottom left, there is a "< Back" button.

| Date/Time           | Computer   | Description                           |
|---------------------|------------|---------------------------------------|
| 12/2/2007 5:00:44   | [REDACTED] | Database Backup Failed                |
| 11/30/2007 15:49:57 | [REDACTED] | Master Service started                |
| 11/30/2007 15:49:57 | [REDACTED] | Upgrade Successful                    |
| 11/30/2007 15:29:46 | [REDACTED] | Master Service shut down successfully |
| 11/28/2007 16:44:31 | [REDACTED] | Master Service started                |

**FIGURE 9-2. Sample Log Query screen**

## Generating Reports

One-time reports provide a summary of the selected content just once. Scheduled reports provide a summary of the selected content on a regular basis.

## Navigation Path: Reports > One-time Reports or Scheduled Reports

Reports > Scheduled Reports > Add a report template

Report template name:

**Schedule**

Daily  
 Weekly, every   
 Monthly, on day   
 Generate report at:  :   
hh :mm

**Content**  Select all

|                          |                          |
|--------------------------|--------------------------|
| <input type="checkbox"/> | Antivirus                |
| <input type="checkbox"/> | Outbreak Defense History |
| <input type="checkbox"/> | Anti-spyware             |
| <input type="checkbox"/> | Anti-spam summary        |
| <input type="checkbox"/> | Web Reputation           |
| <input type="checkbox"/> | Behavior Monitoring      |
| <input type="checkbox"/> | Content Filtering        |
| <input type="checkbox"/> | Network Virus            |

**Send Report**

Send the report to:   
Separate multiple entries with a semicolon (;)  
 Example: Administrator; user1@domain.com

As a PDF attachment  
 As a link to the report

### To create or schedule a report:

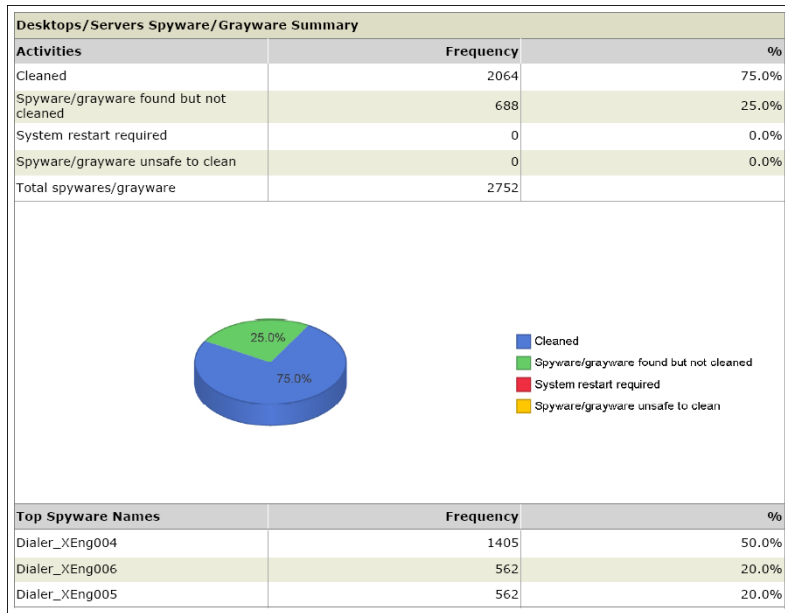
- From the **One-time Reports** screen or **Scheduled Report** screen, click **New Report/Add**.
- Update the following options as required:
  - Report Name/Report Template Name:** A brief title that helps identify the report/template.
  - Schedule:** Applicable only for Scheduled Reports.
    - Daily:** The Scheduled Scan runs every day at the specified time.
    - Weekly, every:** The Scheduled Scan runs once a week on the specified day at the specified time.
    - Monthly, on day:** The Scheduled Scan runs once a month on the specified day at the specified time. If you select 31 days and the month

has only 30 days, Worry-Free Business Security will not generate the report that month.

- **Generate report at:** The time Worry-Free Business Security should generate the report.
  - **Time Range:** Limits the report to certain dates.
  - **Content:** To select all threats, select the **Select All** check box. To select individual threats, click the corresponding check box. Click  to expand the selection.
  - **Send the report to:** Worry-Free Business Security sends the generated report to the specified recipients. Separate multiple entries with semicolons (;).
    - **As a PDF attachment**
    - **As a link to the report**
3. Click **Generate/Add**. View the report from the **One-Time Reports or Scheduled Reports** screen by clicking the name of the Report. If **Send the report to** is enabled, Worry-Free Business Security sends the PDF attachment or link to the recipients.

To delete a report, from the **One-Time Reports or Scheduled Reports** screen, select the check box corresponding to the report and click **Delete**.

To edit a scheduled report template, from the **Scheduled Reports** screen, click the name of the template and update the options as required.



**FIGURE 9-3.** Sample report showing spyware/grayware summary

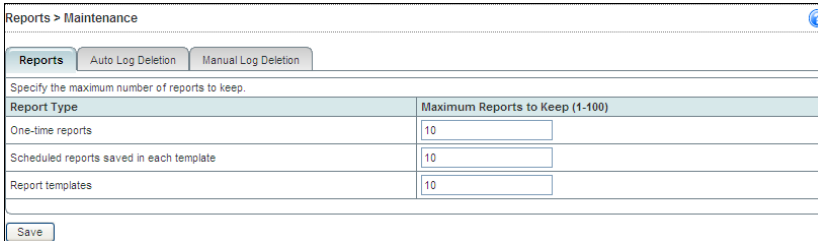
## Managing Logs and Reports

Reports can accumulate quickly if not deleted periodically. Deleting reports can be a time-consuming and tedious task. Worry-Free Business Security allows you to automate this task. Reports are based on logs, and, when the log information is deleted, reports can no longer be generated.

### Maintaining Reports

Delete outdated reports by limiting the number reports Worry-Free Business Security stores.

## Navigation Path: Reports > Maintenance > Reports tab



Reports > Maintenance

Reports Auto Log Deletion Manual Log Deletion

Specify the maximum number of reports to keep.

| Report Type                              | Maximum Reports to Keep (1-100) |
|--|---------------------------------|
| One-time reports                         | 10                              |
| Scheduled reports saved in each template | 10                              |
| Report templates                         | 10                              |

Save

**FIGURE 9-4. Reports Maintenance screen**

### To set the maximum number of reports to keep:

1. From the **Reports** tab on the **Maintenance** screen, configure the maximum number of reports to store for the following:
  - **One-time reports**
  - **Scheduled reports saved in each template**
  - **Report templates**
2. Click **Save**.

## Automatically Deleting Logs

Automatically delete outdated logs by setting the maximum number of days to store logs.

## Navigation Path: Reports > Maintenance > Auto Log Deletion tab

Reports > Maintenance ?

Set up criteria for deleting older logs automatically.

**Security Server**

| Log Type                                       | First Log Entry  | Most Recent Log Entry | Delete Log Entry Order Than |
|--|------------------|-----------------------|-----------------------------|
| <input type="checkbox"/> Manual scan logs      | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days   |
| <input type="checkbox"/> Update logs           | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days   |
| <input type="checkbox"/> Outbreak Defense logs | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days   |
| <input type="checkbox"/> Dashboard event logs  | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days   |

**Desktops/Servers**

| Log Type                            | First Log Entry  | Most Recent Log Entry | Delete Log Entry Order Than |
|-------------------------------------|------------------|-----------------------|-----------------------------|
| <input type="checkbox"/> Virus logs | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days   |
| <input type="checkbox"/>            | 03/11/2007 11:00 |                       | <input type="text"/> days   |

**FIGURE 9-5. Auto Log Deletion screen**

### To automatically delete logs:

1. From the **Auto Log Deletion** tab on the **Maintenance** screen, select the **Log Type** and specify the number of days to store them.
2. Click **Save**.

## Manually Deleting Logs

Manually delete logs when they are no longer required.

**Navigation Path: Reports > Maintenance > Reports tab**

Reports > Maintenance ?

Set up criteria for deleting older logs immediately

| Security Server       |                  |                       |   |
|-----------------------|------------------|-----------------------|---|
| Log Type              | First Log Entry  | Most Recent Log Entry | Delete Log Entry Order Than                                     |
| Manual scan logs      | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days <input type="button" value="Delete"/> |
| Update logs           | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days <input type="button" value="Delete"/> |
| Outbreak Defense logs | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days <input type="button" value="Delete"/> |
| Dashboard event logs  | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days <input type="button" value="Delete"/> |

| Desktops/Servers |                  |                       |   |
|------------------|------------------|-----------------------|---|
| Log Type         | First Log Entry  | Most Recent Log Entry | Delete Log Entry Order Than                                     |
| Virus logs       | 03/11/2007 11:00 | 10/05/2007 11:00      | <input type="text"/> days <input type="button" value="Delete"/> |
|                  | 03/11/2007 11:00 |                       | <input type="text"/> days <input type="button" value="Delete"/> |

**FIGURE 9-6. Manual Log Deletion screen****To manually delete logs:**

1. From the **Manual Log Deletion** tab on the **Maintenance** screen, specify the number of days to store a log type and click **Delete** corresponding to the log type.
2. Click **Save**.

---

**Tip:** To delete all the logs, specify zero (0) as the number of days and click **Delete**.

---

---

# Working with Notifications

This chapter explains how to use the different notification options. The topics discussed in this chapter include:

- *About Notifications* on page 10-2
- *Configuring Notifications* on page 10-3
- *Customizing Notification Alerts* on page 10-4
- *Configuring Notification Settings* on page 10-5

## About Notifications

To minimize the amount of time Administrators need to monitor Worry-Free Business Security and to ensure Administrators receive early warnings about looming outbreak situations, set the Security Server to send notifications whenever there are abnormal events on the network. Worry-Free Business Security can send notifications using email, SNMP, or Windows event logs.

The conditions for notifications affect the Live Status screen. The conditions trigger the status icon to change from Normal to Warning or to Action Required.

By default, all events listed in the Notifications screen are selected and trigger the Security Server to send a notification to the system Administrator.

## Threat Events

- **Outbreak Defense:** An alert is declared by TrendLabs or highly critical vulnerabilities are detected.
- **Antivirus:** Virus/malware detected on Clients exceeds a certain number, actions taken against virus/malware are unsuccessful, Real-time Scan disabled on Clients.
- **Anti-spyware:** Spyware/grayware detected on Clients, including those that require restarting the infected Client to completely remove the spyware/grayware threat. You can also configure the spyware/grayware notification threshold, that is, the number of spyware/grayware incidents detected within the specified time period (default is one hour).
- **Web Threat Protection:** The number of URL violations exceeds the configured number in a certain period.
- **Behavior Monitoring:** The number of policy violations exceeds the configured number in a certain period.
- **Network Virus:** Network viruses detected exceeds a certain number.

## System Events

- **License:** Product license is about to expire or has expired, seat count usage is more than 80%, or seat count is usage more than 100%.
- **Component update:** Last time components updated exceeds a certain number of days or updated components not deployed to Agents quick enough.

- **Unusual system events:** Remaining disk space on any of the Clients running Windows Server operating system is less than the configured amount; reaching dangerously low levels.

## Configuring Notifications

Configuring Notifications involves two steps — First, select the events for which you need notifications and then configure the methods of delivery. Worry-Free Business Security offers three methods for delivery — email notifications, SNMP notifications, and Windows Event log.

**Navigation Path: Preferences > Notifications > Events tab**

Preferences > Notifications ?


Select the events that you want Security Server to notify you about. Click each link to modify the notification subject and message if necessary.

**Events** Settings

| Threat Events                       |   |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Type  |
| <input type="checkbox"/>            | Outbreak Defense  |
|                                     | <input checked="" type="checkbox"/> <a href="#">Red Alert activated</a>   |
|                                     | <input checked="" type="checkbox"/> <a href="#">Yellow Alert activated</a>  |
|                                     | <input checked="" type="checkbox"/> <a href="#">Highly critical vulnerabilities detected</a>  |
| <input type="checkbox"/>            | Antivirus   |
| <input type="checkbox"/>            | Anti-spyware  |
| <input type="checkbox"/>            | Web Reputation  |
| <input type="checkbox"/>            | Behavior Monitoring   |
| <input type="checkbox"/>            | Network Virus   |
| System Events                       |   |
| <input checked="" type="checkbox"/> | Type  |
| <input type="checkbox"/>            | License   |
| <input type="checkbox"/>            | Component update  |
| <input type="checkbox"/>            | Unusual system events   |
|                                     | <input checked="" type="checkbox"/> <a href="#">The available free disk space is decreasing to less than</a> <input type="text" value="1"/> % |

**FIGURE 10-1.** Notification Events screen

**To configure notification events:**

- From the **Events** tab on the **Notifications** screen, update the following as required:
  - Threat Events:** Select the **Type** check box to receive notifications for all events. Alternatively, select check boxes corresponding to individual events.
  - Click  to expand each event and configure the threshold and/or time period for the event.
- Click **Save**.

## Customizing Notification Alerts

Customize the subject line and the message body of event notifications.

**Navigation Path:** [Preferences](#) > [Notifications](#) > [Click a notification](#)



Preferences > Notifications > Red Alert activated

Condition: Red Alert activated

**Notification Content**

Subject: [Trend Micro Security Server - <SCSM\_SERVERNAME>]Red alert

Message: Trend Micro Security Server has deployed a response to a world wide virus outbreak. Refer to the Outbreak Defense screen on your Security Server to learn how to respond.

Save Cancel

**FIGURE 10-2.** Notification content screen

**To customize the content of a notification:**


---

**WARNING!** Do not change the information enclosed in square brackets.

---

- Type the new subject line in the **Subject** field.
- Type the new message in the **Message** field.
- Click **Save**.

# Configuring Notification Settings

**Navigation Path: Preferences > Notifications > Settings tab**

Preferences > Notifications

Select the events that you want Security Server to notify you about. Click each link to modify the notification subject and message if necessary.

Events Settings

**Email Notification**

From: Administrator@TrendMicroWFBS.Local

To:

For example, user1@domain.com:user2@domain.com  
(Separate multiple entries with a semicolon)

**SNMP Notification Recipient**

Enable SNMP notifications

IP Address:

Community:

**Logging**

Write to Windows event log

Save

**FIGURE 10-3. Notifications screen**

## To configure the notification delivery method:

- From the **Settings** tab on the **Notifications** screen, update the following as required:
  - Email Notification:** Set the email addresses of the sender and recipients of the notifications. Configure the content of the email message from the **Events** tab.
    - From**
    - To:** Separate multiple email addresses with semicolons (;).
  - SNMP Notification Recipient:** SNMP is protocol used by network hosts to exchange information used in the management of networks. To view data in the SNMP trap, use a Management Information Base browser.
    - Enable SNMP notifications**
    - IP Address:** The SNMP trap's IP address.
    - Community:** The SNMP Community string.
  - Logging:** Notifications using the Windows Event log
    - Write to Windows event log**

---

**Note:** You can use either or all of the above-mentioned notification methods.

---

2. Click **Save**.

---

# Configuring Global Settings

This chapter explains how to use Global Settings. The topics discussed in this chapter include:

- *Internet Proxy Options* on page 11-2
- *SMTP Server Options* on page 11-3
- *Desktop/Server Options* on page 11-3
- *System Options* on page 11-10

## Internet Proxy Options

If the network uses a proxy server to connect to the Internet, specify proxy server settings for the following services:

- Component updates, license notifications, and the Smart Protection Network  
To set proxy server settings for these services, modify the fields under **Settings for updates, license notifications, and Smart Protection Network** in the **Proxy** tab.
- Web Threat Protection and Behavior Monitoring  
To set proxy server settings for these services, modify the fields under **Settings for Web Threat Protection and Behavior Monitoring** in the **Proxy** tab.

---

**Note:** Note: CSA will always use the same proxy server and port used by Internet Explorer to connect to the Internet for Web Threat Protection and behavior monitoring. Duplicate the logon credentials you have specified for the update service only if Internet Explorer on client computers uses the same proxy server and port.

---

### Navigation Path: Preferences > Global Settings > Proxy tab

The screenshot displays the 'Preferences > Global Settings' window. At the top, it indicates 'Global settings apply to all computer(s) on the entire network.' Below this are four tabs: 'Proxy', 'SMTP', 'Desktop/Server', and 'System', with 'Proxy' selected. The window is divided into two main sections:

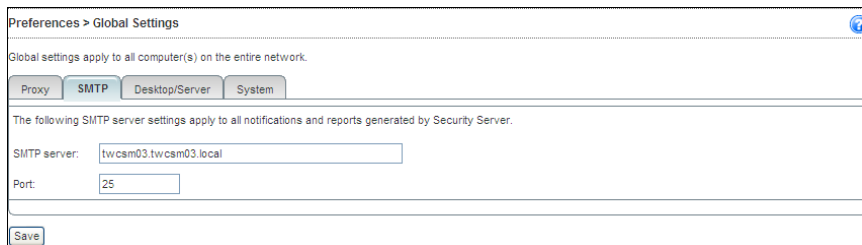
- Settings for updates, license notifications, and Smart Protection Network:**
  - Use a proxy server for updates, license notifications, and the Smart Protection Network feedback function
  - Use SOCKS 4/5 proxy protocol
  - Address:  (For example, proxy.trend.com.tw or 123.123.123.123)
  - Port:
  - Proxy server authentication:
    - User name:
    - Password:
- Settings for Web Threat Protection and Behavior Monitoring:**
  - Web Threat Protection and Behavior Monitoring services use the proxy server address and port used by Internet Explorer on client computers. Provide logon credentials if the proxy server requires authentication.
  - Use the credentials specified for the update proxy (above)
  - User name:
  - Password:

**FIGURE 11-1.** Global Settings—Proxy Server Settings screen

## SMTP Server Options

The SMTP Server settings apply to all notifications and reports generated by Worry-Free Business Security.

**Navigation Path: Preferences > Global Settings > SMTP tab**



The screenshot shows the 'Preferences > Global Settings' window. At the top, it says 'Global settings apply to all computer(s) on the entire network.' Below this are four tabs: 'Proxy', 'SMTP', 'Desktop/Server', and 'System'. The 'SMTP' tab is selected. The text below the tabs reads: 'The following SMTP server settings apply to all notifications and reports generated by Security Server.' There are two input fields: 'SMTP server:' with the value 'twcam03.twcam03.local' and 'Port:' with the value '25'. A 'Save' button is located at the bottom left of the form.

**FIGURE 11-2. SMTP tab on the Global Settings screen**

**To set the SMTP server:**

1. From the SMTP tab on the Global Settings screen, update the following as required:
  - **SMTP server:** The IP address or the name of the SMTP server.
  - **Port**
2. Click **Save**.

## Desktop/Server Options

The Desktop/Server options pertain to the Worry-Free Business Security global settings. Settings for individual groups override these settings. If you have not configured a particular option for a group, the Desktop/Server Options are used. For example, if no URLs are approved for a particular group, all the URLs approved on this screen will be applicable for the group.

## Navigation Path: Preferences > Global Settings > Desktop/Server tab

Preferences > Global Settings

Global settings apply to all computer(s) on the entire network.

Proxy SMTP **Desktop/Server** System

**Location Awareness**

CSM automatically identifies the location of a client based on the CSM Server Gateway information. The default setting for a VPN connection is External. To change the setting to Internal Connection, add the Gateway Address and MAC Address manually.

Enable location awareness (affects Internal/External settings of WRS and Firewall)

Gateway IP address:  Add >>

| Gateway IP Address | Mac Address       |
|--------------------|-------------------|
| 10.1.131.254       | 00:13:80:28:BB:CC |

MAC address (optional):

**General Scan Settings**

Exclude the Security Server database folder.

Exclude Microsoft Exchange server folders when installed on Microsoft Exchange server. ⓘ

Exclude Microsoft Exchange Server Controller folders ⓘ

**Agent Uninstallation**

Allow the client user to uninstall Client/Server Security Agent

Require a password for the client user to uninstall Client/Server Security Agent

Password:

Confirm password:

**Agent Unloading**

Allow the client user to unload Client/Server Security Agent

Require a password for the client user to unload Client/Server Security Agent

Password:

Confirm password:

Save

**FIGURE 11-3.** Desktop/Server tab of the Global Settings screen

### To set the Desktop/Server options:

- From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:
  - Location Awareness* on page 11-5
  - General Scan Settings* on page 11-5
  - Virus Scan Settings* on page 11-6
  - Spyware/Grayware Scan Settings* on page 11-7

- *Web Threat Protection* on page 11-7
  - *Behavior Monitoring* on page 11-7
  - *IM Content Filtering* on page 11-8
  - *Alert Settings* on page 11-8
  - *Watchdog Settings* on page 11-9
  - *Agent Uninstallation* on page 11-9
  - *Agent Unloading* on page 11-9
2. Click **Save**.

## Location Awareness

Location Awareness controls the In Office/Out of Office connection settings. Refer to *Control Security Settings Based on Location* on page 1-23 for more information.

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Enable location awareness:** These settings will affect the In Office/Out of Office connection settings of Web Threat Protection, TrendSecure, and Firewall.
- **Gateway Information:** Clients and connections in this list will use Internal Connection settings while remotely connecting to the network (using VPN) and Location Awareness is enabled.
  - **Gateway IP address**
  - **MAC address:** Adding the MAC address improves security by permitting only the configured device to connect.

Click the corresponding  icon to delete an entry.

## General Scan Settings

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Exclude the Security Server database folder:** Prevents Agents installed on the Security Server from scanning its own database only during Real-time Scans.

---

**Note:** By default, Worry-Free Business Security does not scan its own database. Trend Micro recommends preserving this selection to prevent any possible corruption of the database that may occur during scanning.

---

- **Exclude Microsoft Exchange server folders when installed on Microsoft Exchange server:** Prevents Agents installed on the Microsoft Exchange server from scanning Microsoft Exchange folders.
- **Exclude Microsoft Domain Controller folders:** Prevents Agents installed on the Domain Controller from scanning Domain Controller folders. These folders store user information, user names, passwords, and other important information.
- **Exclude Shadow Copy sections:** Shadow Copy or Volume Snapshot Services takes manual or automatic backup copies or snapshots of a file or folder on a specific volume.

## Virus Scan Settings

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Configure scan settings for large compressed files:** Specify the maximum size of the extracted file and the number of files in the compressed file the Agent should scan.
- **Clean compressed files:** Agents will try to clean infected files within a compressed file.
- **Scan up to { } OLE layers:** Agents will scan the specified number of Object Linking and Embedding (OLE) layers. OLE allows users to create objects with one application and then link or embed them in a second application. For example, an .xls file embedded in a .doc file.
- **Add Manual Scan to the Windows shortcut menu on Clients:** Adds a **Scan with Client/Server Security Agent** link to the context-sensitive menu. With this, users can right-click a file or folder (on the Desktop or in Windows Explorer) and manually scan the file or folder.

## Spyware/Grayware Scan Settings

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Scan for cookies:** Agents will scan for and remove tracking cookies downloaded to Clients by visiting Web sites. Detected tracking cookies are added to the spyware/grayware counter on the **Live Status** screen.
- **Count cookie into spyware log:** Adds each detected spyware cookie to the spyware log.

## Web Threat Protection

Web Threat Protection enhances protection against visiting malicious Web sites. Web Threat Protection leverages Trend Micro's extensive Web security database to check the reputation of HTTP URLs that users are attempting to access or URLs that are embedded in email messages. Refer to *Protect Clients from Visiting Malicious Web Sites* on page 1-24 for more details.


From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **URLs to Approve:** Separate multiple URLs with semicolons (;). Click **Add**.

---

**Note:** Approving a URL implies approving all its sub domains.

---

- **Approved URL list:** URLs in this list will not be blocked. To delete an entry, click the corresponding  icon.
- **Enable CSA usage logs:** Agents will send details of accessed URLs to the Security Server.

Refer to *Web Threat Protection* on page 5-15 for details on configuring Web Threat Protection based on the Client's location.

## Behavior Monitoring

Behavior Monitoring protects Clients from unauthorized changes to the operating system, registry entries, other software, or files and folders.

**Enable pop-ups for low-risk changes or actions monitored:** Agents warn the users of low-risk change or monitored actions.


## IM Content Filtering

Administrators can restrict the usage of certain words or phrases in instant messaging applications. Instant Messaging (IM) is a form of real-time communication between two or more people based on typed text. The text is transmitted through Clients connected over a network.

Agents can restrict words used in the following IM applications:

- AIM 6 (builds released after March 2008 are not supported)
- ICQ 6 (builds released after March 2008 are not supported)
- MSN Messenger 7.5, 8.1
- Windows Messenger Live 8.1, 8.5
- Yahoo! Messenger 8.1

From the **Desktop/Server** tab of the **Global Settings** screen, use the following fields as described:

- **Restricted Words:** Use this field to add restricted words or phrases. You can restrict a maximum of 31 words or phrases. Each word or phrase cannot exceed 35 characters (17 for Chinese characters). Type an entry or multiple entries separated by semicolons (;) and then click **Add>>**.
- **Restricted Words/Phrases list:** Words or phrases in this list cannot be used in IM conversations. To delete an entry, click the corresponding  icon.

## Alert Settings

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Show the alert icon on the Windows taskbar if the virus pattern file is not updated after { } days:** Displays an alert icon on Clients when the pattern file is not updated after a certain number of days.

## Watchdog Settings

The Watchdog option ensures Client/Server Security Agent is constantly protecting Clients. When enabled, the Watchdog checks the availability of the Agent every x minutes. If the Agent is unavailable, the Watchdog will attempt to restart the Agent.

---

**Tip:** Trend Micro recommends enabling the Watchdog service to help ensure that the Client/Server Security Agent is protecting your Clients. If the Client/Server Security Agent unexpectedly terminates, which could happen if the Client is under attack from a hacker, the Watchdog service restarts the Client/Server Security Agent.

---

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Enable the Agent Watchdog service**
- **Check client status every {} minutes:** Determines how often the Watchdog service should check Client status.
- **If the client cannot be started, retry {} times:** Determines how many times the Watchdog service should attempt to restart the Client/Server Security Agent.

## Agent Uninstallation

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Allow the client user to uninstall Client/Server Security Agent:** Allows users to uninstall the Client/Server Security Agent.
- **Require a password for the client user to uninstall Client/Server Security Agent:** Allows users to uninstall the Client/Server Security Agent after providing the specified password.
  - **Password**
  - **Confirm password**

## Agent Unloading

From the **Desktop/Server** tab of the **Global Settings** screen, update the following as required:

- **Allow the client user to unload Client/Server Security Agent:** Allows users to unload the Client/Server Security Agent.
- **Require a password for the client user to unload the Client/Server Security Agent:** Allows users to unload the Client/Server Security Agent after providing the specified password.
  - **Password**
  - **Confirm password**

## System Options

The System section of the Global Settings screen contains options to automatically remove inactive agents, check the connection of agents, and maintain the quarantine folder.

**Navigation Path: Preferences > Global Settings > System tab**

The screenshot shows the 'System' tab of the 'Global Settings' screen. It is divided into three main sections: 'Remove Inactive Client/Server Security Agent', 'Connection Verification', and 'Quarantine Maintenance'. The 'Remove Inactive' section has a checked box for 'Enable automatic removal' and a dropdown set to '30' days. The 'Connection Verification' section has a checked box for 'Enable scheduled verification' and radio buttons for 'Hourly', 'Daily' (selected), and 'Weekly'. The 'Daily' option has a 'Start time' of '14:00' (hh:mm). A 'Verify Now' button is present. The 'Quarantine Maintenance' section shows the quarantine directory as 'E:\Program Files\Trend Micro\Security Server\PCCSRV\virus', with 76 files and 3,483K bytes. It includes input fields for 'Quarantine folder capacity' (10240 MB) and 'Maximum size for a single file' (64 MB), along with a 'Delete All Quarantined Files' button. A 'Save' button is at the bottom left.

**FIGURE 11-4.** System tab of the Global Settings screen

**To set the System options:**

1. From the **System** tab of the **Global Settings** screen, update the following as required:
  - *Removing Inactive Client/Server Security Agents* on page 11-11
  - *Verifying Client-Server Connectivity* on page 11-12
  - *Maintaining the Quarantine Folder* on page 11-12
2. Click **Save**.

## Removing Inactive Client/Server Security Agents

When you use the Client/Server Security Agent uninstallation program on the Client to remove the Agents from a Client, the program automatically notifies the Security Server. When the Security Server receives this notification, it removes the Client icon from the Security Groups Tree to show that the Client no longer exists.

However, if the Client/Server Security Agent is removed using other methods, such as reformatting the computer's hard drive or deleting the Client files manually, the Security Server will be unaware of the removal and will display the Client/Server Security Agent as inactive. If a user unloads or disables the Agent for an extended time, the Security Server also displays the Client/Server Security Agent as inactive.

To have the Security Groups Tree only display active Clients, you can configure the Security Server to remove inactive Client/Server Security Agents from the Security Groups Tree automatically.

**To remove inactive Agents:**

1. From the **System** tab of the **Global Settings** screen, update the following as required:
  - **Enable automatic removal of inactive Client/Server Security Agent:** Enables the automatic removal of Clients that have not contacted the Security Server for the specified number of days.
  - **Automatically remove a Client/Server Security Agent if inactive for {} days:** The number of days that a Client is allowed to be inactive before it is removed from the Web console.
2. Click **Save**.

## Verifying Client-Server Connectivity

Worry-Free Business Security represents the Client connection status in the Security Groups Tree using icons. However, certain conditions may prevent the Security Groups Tree from displaying the correct Client connection status. For example, if the network cable of a Client is accidentally unplugged, the Client will not be able to notify the Trend Micro Security Server that it is now offline. This Client will still appear as online in the Security Groups Tree.

You can verify client-server connection manually or schedule the verification from the Web console.

---

**Note:** Verify Connection does not allow the selection of specific groups or Clients. It verifies the connection to all Clients registered with the Security Server.

---

### To verify the client-server connectivity:

1. From the **System** tab of the **Global Settings** screen, update the following as required:
  - **Enable scheduled verification:** Enables scheduled verification of Agent-Security Server communication.
    - **Hourly**
    - **Daily**
    - **Weekly, every**
    - **Start time:** The time the verification should start.
  - **Verify Now:** Instantly tests the Agents-Security Server connectivity.
2. Click **Save**.

## Maintaining the Quarantine Folder

Whenever an Agent detects an Internet threat in a file and the scan action for that type of threat is quarantine, the Agent encrypts the infected file, moves it to the Client's quarantine folder, and sends it to the Trend Micro Security Server quarantine folder. Worry-Free Business Security encrypts the infected file to prevent it from infecting other files.

The default location of Client/Server Security Agent quarantine folder is as follows:

C:\Program Files\Trend Micro\Client Server Security Agent\SUSPECT

The default location of Trend Micro Security Server quarantine folder is as follows:

C:\Program Files\Trend Micro\Security Server\PCCSRV\Virus

---

**Note:** If the Agent is unable to send the encrypted file to the Trend Micro Security Server for any reason, such as network connection problems, the encrypted file remains in the Client's quarantine folder. The Agent attempts to resend the file when it reconnects to the Trend Micro Security Server.

---

For more information on configuring scan settings or changing the location of the quarantine folder, see *Virus Scan Settings* on page 11-6.

**To maintain quarantine folders:**

1. From the **System** tab of the **Global Settings** screen, update the following as required:
  - **Quarantine folder capacity:** The size of the quarantine folder in MB.
  - **Maximum size for a single file:** The maximum size of a single file stored in the quarantine folder in MB.
  - **Delete All Quarantined Files:** Deletes all files in the Quarantine folder. If the folder is full and a new file is uploaded, the new file will not be stored.
2. Click **Save**.



---

# Performing Additional Administrative Tasks

This chapter explains how to use additional administrative tasks such as viewing the product license, working with the Plug-in Manager, and uninstalling the Security Server. The topics discussed in this chapter include:

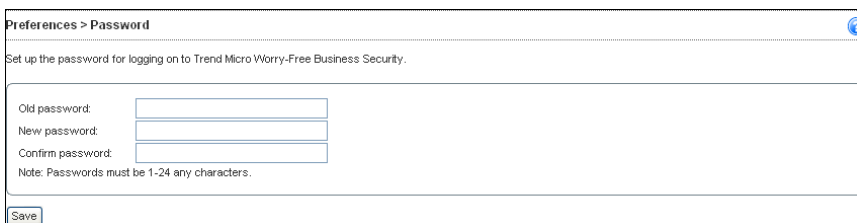
- *Changing the Web Console Password* on page 12-2
- *Working with the Plug-in Manager* on page 12-3
- *Viewing Product License Details* on page 12-3
- *Participating in the Smart Protection Network* on page 12-5
- *Changing the Agent's Interface Language* on page 12-5
- *Uninstalling the Trend Micro Security Server* on page 12-6

## Changing the Web Console Password

To prevent unauthorized users from modifying your settings or removing the Agent from your Clients, the Web console is password protected. The Worry-Free Business Security master setup program requires you to specify a Web console password; however, you can modify your password from the Web console.

**Tip:** Trend Micro recommends using strong passwords for the Web console. A strong password is at least eight characters long, has one or more uppercase letters (A-Z), has one or more lowercase letters (a-z), has one or more numerals (0-9), and has one or more special characters or punctuation marks (!@#\$\$%^&,,:;?). Strong passwords never are the same as the user's login name or contain the login name in the password itself. They do not consist of the user's given or family name, birth dates, or any other item that is easily identified with the user.

### Navigation Path: Preferences > Password



Preferences > Password

Set up the password for logging on to Trend Micro Worry-Free Business Security.

Old password:

New password:

Confirm password:

Note: Passwords must be 1-24 any characters.

Save

**FIGURE 12-1.** Preferences–Password screen

#### To change the Web console password:

1. From the **Password** screen, update the following options as required:
  - **Old password**
  - **New password**
  - **Confirm password:** Re-type the new password to confirm.
2. Click **Save**.

**Note:** If you forget the Web console password, contact Trend Micro technical support for instructions on how to gain access to the Web console again. The only alternative is to

remove and reinstall Worry-Free Business Security. Refer to *Uninstalling the Trend Micro Security Server* on page 12-6.

## Working with the Plug-in Manager

### Navigation Path: Preferences > Plug-ins

Plug-in Manager displays the programs for both the Worry-Free Business Security and Agents in the Web console as soon as they become available. You can then install and manage the programs from the Web console, including deploying the client plug-in programs to Agents.

Download and install Plug-in Manager by clicking Plug-in Manager on the main menu of the Web console. After the installation, you can check for available plug-in programs.


Refer to the Plug-in's documentation for more information.

## Viewing Product License Details

From the product license screen, you can renew, upgrade, or view product license details.

### Navigation Path: Preferences > Product License

Preferences > Product License

 Your license has been activated. [View license upgrade instructions](#)

| License Information     |   |
|-------------------------|---|
| Product:                | Trend Micro Worry-Free Business Security Advanced |
| Version:                | Trial   |
| Activation code:        | N/A <a href="#">Enter a new code</a>              |
| Seats:                  | 2500  |
| Status:                 | Activated   |
| Maintenance expiration: | 2/14/2008 0:00:00                                 |

**FIGURE 12-2.** Preferences–Product License screen

The Product License screen displays details about your license. Depending on the options you chose during installation, you might have a fully licensed version or an evaluation version. In either case, your license entitles you to a maintenance agreement. When your maintenance agreement expires the Clients on your network will be protected in a very limited way. Use the Product License screen to determine when your license will expire and ensure that you renew your license before it expires.

## Consequences of an Expired License

When a Full-version Activation Code expires, you can no longer download engine or pattern file updates. However, unlike an evaluation-version Activation Code, when a full-version Activation Code expires, all existing configurations and other settings remain in force. This provision maintains a level of protection in case you accidentally allow your license to expire.

### To renew the product license:

1. Contact your Trend Micro sales representative or corporate reseller to renew your license agreement.

Reseller Information stored in:

```
Program files\trend micro\security server\pccsrv\  
private\contact_info.ini
```

2. A Trend Micro representative will update your registration information using Trend Micro Product Registration.
3. The Security Server polls the Product Registration server and receives the new expiry date directly from the Product Registration server. You are not required to manually enter a new Activation Code when renewing your license.

## Changing your License

Your Activation Code determines the type of license you have. You might have an evaluation or a fully licensed version; or you might have a Worry-Free Business Security Advanced license or a Worry-Free Business Security License. If you want to change your license, you can use the Product License screen to enter a new Activation Code.

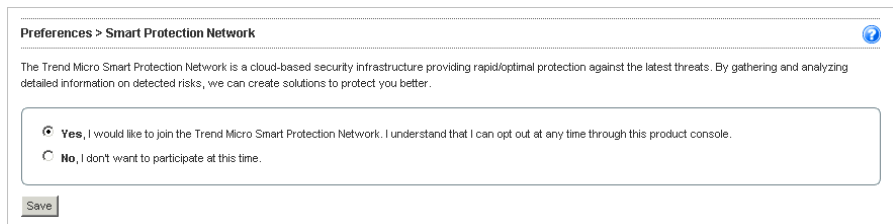
**To change your license from an evaluation version to a fully licensed version:**

1. Click **Enter a new code**.
2. Type your new Activation Code in the space provided.
3. Click **Activate**.

## Participating in the Smart Protection Network

Your participation in the Trend Micro Smart Protection Network will help Trend Micro provide proactive solutions that block threats before they reach you. As part of the Smart Protection Network, you provide important data to our correlation technologies, which are then able to weed out threat sources before they can do more harm. This feedback mechanism gathers threat information based on the reputation of the communication source, not on the content of the specific communication, so the privacy of your personal or business information is protected.

**Navigation Path: Preferences > Smart Protection Network**



The screenshot shows a web interface titled "Preferences > Smart Protection Network". Below the title is a help icon. The main text reads: "The Trend Micro Smart Protection Network is a cloud-based security infrastructure providing rapid/optimal protection against the latest threats. By gathering and analyzing detailed information on detected risks, we can create solutions to protect you better." Below this text is a form with two radio button options: "Yes, I would like to join the Trend Micro Smart Protection Network. I understand that I can opt out at any time through this product console." (which is selected) and "No, I don't want to participate at this time." At the bottom left of the form is a "Save" button.

**FIGURE 12-3. Smart Protection Network enrollment screen**

For more information on the Smart Protection Network, visit:

<http://www.trendmicro.com/go/SmartProtectionNetwork>

## Changing the Agent's Interface Language

Administrators can provide locale-specific language packs for Client/Server Security Agents. After administrators install all the language packs users will be able to see the Client/Server Security Agent interface in the language corresponding to operating system's locale.

---

**Note:** The language used on the Agent interface will correspond to the locale configured on the Client operating system.

---

**To provide language packs:**

1. Download the appropriate language packs from the links.
2. Copy the language packs to `PCCSRV\Download\LangPack\` on the Security Server.
3. Restart the Clients that require the new language pack.

## Uninstalling the Trend Micro Security Server

---

**WARNING!** *Uninstalling Trend Micro Security Server makes your network vulnerable.*

---

Worry-Free Business Security uses an uninstall program to safely remove the Trend Micro Security Server from your computer. Remove the Agent from all Clients before removing the Security Server.

---

**Note:** Uninstalling the Trend Micro Security Server does not uninstall Agents. Administrators must uninstall or move all Agents before uninstalling the Trend Micro Security Server. Refer to [Removing Agents](#) on page 3-20.

---

**To remove the Trend Micro Security Server:**

1. On the computer you used to install the server, click **Start > Control Panel > Add or Remove Programs**.
2. Click **Trend Micro Security Server**, and then click **Change/Remove**. A confirmation screen appears.
3. Click **Next**. Master Uninstaller, the server uninstallation program, prompts you for the Administrator password.

4. Type the Administrator password in the text box and click **OK**. Master Uninstaller then starts removing the server files. A confirmation message appears after Security Server has been uninstalled.
5. Click **OK** to close the uninstallation program.



# Using Administrative and Client Tools

This chapter explains how to use the Administrative and Client tools that come with Worry-Free Business Security.

The topics discussed in this chapter include:

- *Tool Types* on page 13-2
- *Administrative Tools* on page 13-3
- *Client Tools* on page 13-7
- *Add-ins* on page 13-12

## Tool Types

Worry-Free Business Security includes a set of tools that can help you easily accomplish various tasks, including server configuration and Client management.

---

**Note:** These tools cannot be used from the Web console. For instructions on how to use the tools, see the relevant sections below.

---

These tools are classified into three categories:

- **Administrative tools:** Helps configure Trend Micro Security Server and manage Agents
  - **Login Script Setup** (`autopcc.exe`): Automates Client/Server Security Agent installation.
  - **Vulnerability Scanner** (`TMVS.exe`): Locates unprotected computers on the network.
- **Client tools:** Helps enhance the performance of the Agents.
  - **Client Packager** (`ClnPack.exe`): Creates a self-extracting file containing the Client/Server Security Agent and components.
  - **Restore Encrypted Virus** (`VSEncode.exe`): Opens infected files encrypted by Worry-Free Business Security.
  - **Touch Tool** (`TmTouch.exe`): Change the time stamp on a hot fix to synchronize it with the system clock.
  - **Client Mover Tool** (`IpXfer.exe`): Transfers Clients from one Security Server to another. Source and destination servers must be running the same version of Worry-Free Business Security and operating systems.
- **Add-ins:** These add-ins to Windows® Small Business Server (SBS) 2008 and Windows Essential Business (EBS) Server 2008 allow administrators to view live security and system information from the SBS and EBS consoles. This is the same high-level information visible from the Live Status screen.

---

**Note:** Some tools available in previous versions of Worry-Free Business Security are not available in this version. If you require these tools, contact Trend Micro Technical Support. Refer to *Trend Micro Support* on page 14-16

---

## Administrative Tools

This section contains information about Worry-Free Business Security administrative tools.

### Login Script Setup

With Login Script Setup, you can automate the installation of the Client/Server Security Agent to unprotected computers when they log on to the network. Login Script Setup adds a program called `autopcc.exe` to the server login script. The program `autopcc.exe` performs the following functions:

- Determines the operating system of the unprotected Client and installs the appropriate version of the Client/Server Security Agent
- Updates the virus pattern file and program files

For instructions on installing Agents, refer to *Installing with Login Script Setup* on page 3-7.

### Vulnerability Scanner

Use Vulnerability Scanner to detect installed antivirus solutions and to search for unprotected computers on your network. To determine if computers are protected, Vulnerability Scanner pings ports that are normally used by antivirus solutions.

Vulnerability Scanner can perform the following functions:

- Perform a DHCP scan to monitor the network for DHCP requests so that when computers first log on to the network, Vulnerability Scan can determine their status
- Ping computers on your network to check their status and retrieve their computer names, platform versions, and descriptions
- Determine the antivirus solutions installed on the network. It can detect Trend Micro products (including OfficeScan, ServerProtect for Windows NT and Linux, ScanMail for Microsoft Exchange, InterScan Messaging Security Suite, and PortalProtect) and third-party antivirus solutions (including Norton AntiVirus Corporate Edition v7.5 and v7.6, and McAfee VirusScan ePolicy Orchestrator).
- Display the server name and the version of the pattern file, scan engine and program for OfficeScan and ServerProtect for Windows NT

- Send scan results through email
- Run in silent mode (command prompt mode)
- Install the Client/Server Security Agent remotely on computers running Windows Vista/2000/XP (Professional only)/Server 2003 (R2)

You can also automate Vulnerability Scanner by creating scheduled tasks. For information on how to automate Vulnerability Scanner, see the TMVS Online Help.

To run Vulnerability Scanner on a computer other than the server, copy the TMVS folder from the \PCCSRV\Admin\Utility folder of the server to the computer.

---

**Note:** You cannot install the Client/Server Security Agent with Vulnerability Scanner if the server component of Worry-Free Business Security is **present** on the same machine. Vulnerability Scanner does not install the Client/Server Security Agent on a machine already **running** the server component of Worry-Free Business Security.

---

#### To configure Vulnerability Scanner:

1. In the drive where you installed the server component of Worry-Free Business Security, open the following directories: **Trend Micro Security Server > PCCSRV > Admin > Utility > TMVS**. Double-click `TMVS.exe`. The Trend Micro Vulnerability Scanner console appears.
2. Click **Settings**. The **Settings** screen appears.
3. In the **Product Query** box, select the products that you want to check for on your network. Select the **Check for all Trend Micro products** to select all products.  
If you have Trend Micro InterScan and Norton AntiVirus Corporate Edition installed on your network, click **Settings** next to the product name to verify the port number that Vulnerability Scanner will check.
4. Under **Description Retrieval Settings**, click the retrieval method that you want to use. Normal retrieval is more accurate, but it takes longer to complete.  
If you click **Normal retrieval**, you can set Vulnerability Scanner to try to retrieve computer descriptions, if available, by selecting the **Retrieve computer descriptions when available** check box.
5. To send the results to you or other Administrators automatically, under **Alert Settings**, select the **Email results to the system Administrator** check box, and then, click **Configure** to specify your email settings:

- **To**
  - **From**
  - **SMTP server:** The address of your SMTP server. For example, smtp.example.com. The SMTP server information is required.
  - **Subject**
6. To display an alert on unprotected computers, select the **Display alert on unprotected computers** check box. Then, click **Customize** to set the alert message. The **Alert Message** screen appears. You can type a new alert message or accept the default message. Click **OK**.
  7. To save the results as a comma-separated value (CSV) data file, select the **Automatically save the results to a CSV file** check box. By default, CSV data files are saved to the TMVS folder. If you want to change the default CSV folder, click **Browse**. The **Browse for folder** screen appears. Browse for a target folder on your computer or on the network and then click **OK**.
  8. You can enable Vulnerability Scanner to ping computers on the network to get their status. Under **Ping Settings**, specify how Vulnerability Scanner will send packets to the computers and wait for replies. Accept the default settings or type new values in the **Packet size** and **Timeout** text boxes.
  9. To remotely install the Agent and send a log to the server, type the server name and port number. To remotely install the Agent automatically, select the **Auto-install Client/Server Security Client on unprotected computer** check box.
  10. Click **Install Account** to configure the account. The **Account Information** screen appears.
  11. Type the user name and password and click **OK**.
  12. Click **OK** to save your settings. The **Trend Micro Vulnerability Scanner** console appears.
- To run a manual vulnerability scan on a range of IP addresses:**
1. Under **IP Range to Check**, type the IP address range that you want to check for installed antivirus solutions and unprotected computers.

---

**Note:** The Vulnerability Scanner only supports class B IP addresses.

---

2. Click **Start** to begin checking the computers on your network. The results are displayed in the **Results** table.

**To run Vulnerability Scanner on computers requesting IP addresses from a DHCP server:**

1. Click the **DHCP Scan** tab in the **Results** box. The **DHCP Start** button appears.
2. Click **DHCP Start**. Vulnerability scanner begins listening for DHCP requests and performing vulnerability checks on computers as they log on to the network.

**To create scheduled tasks:**

1. Under **Scheduled Tasks**, click **Add/Edit**. The **Scheduled Task** screen appears.
2. Under **Task Name**, type a name for the task you are creating.
3. Under **IP Address Range**, type the IP address range that you want to check for installed antivirus solutions and unprotected computers.
4. Under **Task Schedule**, click a frequency for the task you are creating. You can set the task to run **Daily**, **Weekly**, or **Monthly**. If you click **Weekly**, you must select a day from the list. If you click **Monthly**, you must select a date from the list.
5. In the **Start time** lists, type or select the time when the task will run. Use the 24-hour clock format.
6. Under **Settings**, click **Use current settings** if you want to use your existing settings, or click **Modify settings**.

If you click **Modify settings**, click **Settings** to change the configuration. For information on how to configure your settings, refer to Step 3 to Step 12 in *To configure Vulnerability Scanner*: on page 13-4.

7. Click **OK** to save your settings. The task you have created appears under **Scheduled Tasks**.

## Other Settings

To configure the following settings, you need to modify `TMVS.ini`:

- **EchoNum**: Set the number of Clients that Vulnerability Scanner will simultaneously ping.

- **ThreadNumManual:** Set the number of Clients that Vulnerability Scanner will simultaneously check for antivirus software.
- **ThreadNumSchedule:** Set the number of Clients that Vulnerability Scanner will simultaneously check for antivirus software when running scheduled tasks.

**To modify these settings:**

1. Open the TMVS folder and locate the `TMVS.ini` file.
2. Open `TMVS.ini` using Notepad or any text editor.
3. To set the number of computers that Vulnerability Scanner will simultaneously ping, change the value for `EchoNum`. Specify a value between 1 and 64.  
For example, type `EchoNum=60` if you want Vulnerability Scanner to ping 60 computers at the same time.
4. To set the number of computers that Vulnerability Scanner will simultaneously check for antivirus software, change the value for `ThreadNumManual`. Specify a value between 8 and 64.  
For example, type `ThreadNumManual=60` to simultaneously check 60 computers for antivirus software.
5. To set the number of computers that Vulnerability Scanner will simultaneously check for antivirus software when running scheduled tasks, change the value for `ThreadNumSchedule`. Specify a value between 8 and 64.  
For example, type `ThreadNumSchedule=60` to simultaneously check 60 computers for antivirus software whenever Vulnerability Scanner runs a scheduled task.
6. Save `TMVS.ini`.

## Client Tools

This section contains information about Worry-Free Business Security Client tools.

### Client Packager

Client Packager is a tool that can compress setup and update files into a self-extracting file to simplify delivery through email, CD-ROM, or similar media. It

also includes an email function that can access your Microsoft Outlook address book and allow you to send the self-extracting file from within the tool's console.

To run Client Packager, double-click the file. Worry-Free Business Security Clients that are installed using Client Packager report to the server where the setup package was created.

## Restore Encrypted Virus

Client/Server Security Agents encrypt infected files to prevent users from opening them and spreading virus/malware to other files on the Client.

Whenever Client/Server Security Agent backs up, quarantines, or renames an infected file, it encrypts the file. The quarantined file is stored in the `\Suspect` folder on the Client, and then sent to the quarantine directory. The backup file is stored in the `\Backup` folder of the Client, typically in `C:\Program Files\Trend Micro\Client Server Security Agent\Backup\`.

However, there may be some situations when you have to open the file even if you know it is infected. For example, if an important document has been infected and you need to retrieve the information from the document, you will need to decrypt the infected file to retrieve your information. You can use Restore Encrypted Virus to decrypt infected files from which you want to open.

---

**Note:** To prevent Client/Server Security Agent from detecting the virus/malware again when you use Restore Encrypted Virus, exclude the folder to which you decrypt the file from Real-time Scan.

---

**WARNING!** *Decrypting an infected file could spread the virus/malware to other files.*

---

Restore Encrypted Virus requires the following files:

- **Main file:** `VSEncode.exe`
- **Required DLL file:** `VSAPI32.dll`

**To decrypt files in the quarantine folder:**

1. Copy VSEncrypt from the Security Server to the Client:

```
\PCCSRV\Admin\Utility\VSEncrypt.
```

---

**WARNING!** *Do not copy the VSEncrypt folder to the Worry-Free Business Security folder. The VSAPI32.dll file of Restore Encrypted Virus will conflict with the original VSAPI32.dll.*

---

2. Open a command prompt and go to the location where you copied the VSEncrypt folder.
3. Run Restore Encrypted Virus using the following parameters:
  - **no parameter:** Encrypt files in the Quarantine folder
  - **-d:** Decrypt files in the Quarantine folder
  - **-debug:** Create debug log and output in the root folder of the Client
  - **/o:** Overwrite encrypted or decrypted file if it already exists
  - **/f:** {filename}. Encrypt or decrypt a single file
  - **/nr:** Do not restore original file name

For example, you can type `VSEncode [-d] [-debug]` to decrypt files in the Quarantine folder and create a debug log. When you decrypt or encrypt a file, the decrypted or encrypted file is created in the same folder.

---

**Note:** You may not be able to encrypt or decrypt files that are locked.

---

Restore Encrypted Virus provides the following logs:

- `VSEncrypt.log`. Contains the encryption or decryption details. This file is created automatically in the temp folder for the user logged on the machine (normally, on the C: drive).
- `VSEncDbg.log`. Contains the debug details. This file is created automatically in the temp folder for the user logged on the machine (normally, on the C: drive) if you run `VSEncode.exe` with the `-debug` parameter.

**To encrypt or decrypt files in other locations:**

1. Create a text file and then type the full path of the files you want to encrypt or decrypt.

For example, if you want to encrypt or decrypt files in C:\My Documents\Reports, type C:\My Documents\Reports\\*. \* in the text file. Then save the text file with an INI or TXT extension, for example, you can save it as ForEncryption.ini on the C: drive.

2. At a command prompt, run Restore Encrypted Virus by typing `VSEncode.exe -d -i {location of the INI or TXT file}`, where {location of the INI or TXT file} is the path and file name of the INI or TXT file you created (for example, C:\ForEncryption.ini).

## Touch Tool

The Touch Tool synchronizes the time stamp of one file with the time stamp of another file or with the system time of the computer. If you are unsuccessful in deploying a hot fix (an update or patch that Trend Micro releases) on the Trend Micro Security Server, use the Touch Tool to change the time stamp of the hot fix. This causes Worry-Free Business Security to interpret the hot fix file as new, which makes the server attempt to deploy the hot fix again automatically.

**To run the Touch Tool:**

1. On the Trend Micro Security Server, go to the following directory:

```
\PCCSRV\Admin\Utility\Touch
```

2. Copy the `TmTouch.exe` file to the folder where the file you want to change is located. If synchronizing the file time stamp with the time stamp of another file, put both files in the same location with the Touch tool.
3. Open a command prompt and go to the location of the Touch Tool.
4. Type the following:

```
TmTouch.exe <destination_filename> <source_filename>
```

where:

<destination\_filename> = the name of the file (the hot fix, for example) whose time stamp you want to change

<source\_filename> = the name of the file whose time stamp you want to replicate

If you do not specify a source filename, the tool sets the destination file time stamp to the system time of the computer.

---

**Note:** You can use the wildcard character "\*" in the destination file name field, but not the source file name field.

---

5. To verify the time stamp changed, type `dir` in the command prompt or right click the file in Windows explorer and select **Properties**.

## Client Mover

If you have more than one Worry-Free Business Security server on the network, you can use Client Mover to transfer Clients from one Worry-Free Business Security server to another.

This is especially useful after adding a new Worry-Free Business Security server to the network when you want to transfer existing Clients to the new server. Source and destination servers must be running the same version of Worry-Free Business Security and operating systems.

Client Mover requires the `IpXfer.exe` file.

### To run Client Mover:

1. On the Worry-Free Business Security server, go to the following directory:  
`\PCCSRV\Admin\Utility\IpXfer`.
2. Copy the `IpXfer.exe` file to the Client that you want to transfer.
3. On the Client, open a command prompt and then go to the folder where you copied the file.
4. Run Client Mover using the following syntax:

```
IpXfer.exe -s <server_name> -p <server_listening_port> -m 1  
-c <client_listening_port>
```

where:

- <server\_name> = the server name of the destination Worry-Free Business Security server (the server to which the Client will transfer)
- <server\_listening\_port> = the listening (trusted) port of the destination Worry-Free Business Security server. To view the listening port on the Web console, click **Security Settings**. The listening port is shown next to the Security Server name.
- 1 = You must use the number "1" after "-m"
- <client\_listening\_port> = the port number of the Client

**To confirm that the Client now reports to the other server:**

1. On the Client, right click the Client/Server Security Agent icon in the system tray.
2. Select Client/Server Security Agent **Console**.
3. From the **Help** tab, click **more info** in the **Product Information** section.
4. Verify that the Security Server that the CSA reports to is correct.

## Add-ins

Worry-Free Business Security provides add-ins to Windows® Small Business Server (SBS) 2008 and Windows Essential Business (EBS) Server 2008. These add-ins

allow administrators to view live security and system status information from the SBS and EBS consoles.

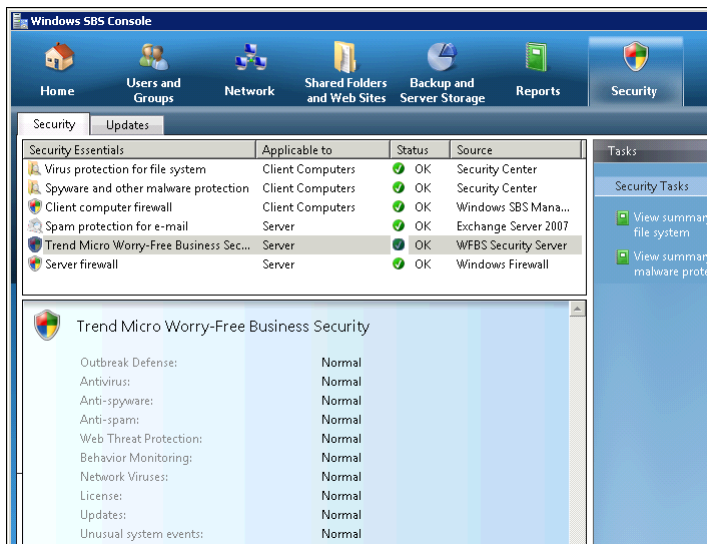


FIGURE 13-1. SBS console displaying live status information

## Installing the SBS and EBS Add-ins

The SBS or the EBS add-in installs automatically when you install the Security Server on a computer running SBS 2008 or EBS 2008. To use the add-in on another computer, you need to install it manually.

### To manually install the add-in for SBS or EBS 2008:

1. Access the Web console from the computer running SBS or EBS 2008.
2. Click **Preferences > Tools** and then click the **Add-ins** tab.
3. Click the corresponding **Download** link to obtain either the SBS or EBS 2008 add-in.
4. On the local computer, open the downloaded file and complete the installation.

## Using the SBS and EBS Add-ins

The SBS and EBS add-ins let administrators view high-level security and system status information on the SBS and EBS consoles.

To use the SBS or EBS add-ins, open the SBS or EBS console. Under the **Security** tab, click **Trend Micro Worry-Free Business Security** to view the status information.

---

# FAQs, Troubleshooting, and Technical Support

This chapter provides answers to commonly asked questions about installation and deployment, describes how to troubleshoot problems that may arise with Worry-Free Business Security, and provides information you will need to contact Trend Micro technical support. The topics discussed in this chapter include:

- *Frequently Asked Questions (FAQs)* on page 14-2
- *Troubleshooting* on page 14-6
- *Trend Micro Security Information Center* on page 14-14
- *Known Issues* on page 14-15
- *Contacting Trend Micro* on page 14-16
- *Trend Micro Support* on page 14-16
- *About TrendLabs* on page 14-18
- *About Trend Micro* on page 14-19

## Frequently Asked Questions (FAQs)

The following is a list of frequently asked questions and answers.

### How can I further protect Clients?

You can take many steps to prevent the installation of spyware/grayware onto your Clients. Trend Micro suggests making the following standard practices part of the security initiative in your organization:

- Follow all Trend Micro recommendations in this document.
- Educate your users to:
  - Read the End User License Agreement (EULA) and included documentation of applications they download and install on their computers.
  - Click **No** to any message asking for authorization to download and install software unless the users are certain both the creator of the software and the Web site they are viewing are trustworthy.
  - Disregard unsolicited commercial email (spam), especially if the spam asks users to click a button or hyperlink.
- Configure Web browser settings that ensure a strict level of security. Trend Micro recommends requiring Web browsers to prompt users before installing ActiveX controls. To increase the security level for Internet Explorer (IE), go to **Tools > Internet Options > Security** and move the slider to a higher level. If this setting causes problems with Web sites you want to visit, click **Sites**, and add the sites you want to visit to the trusted sites list.
- If using Microsoft Outlook, configure the security settings so that Outlook does not automatically download HTML items, such as pictures sent in spam messages. Creators of spyware/grayware often use pictures.
- Prohibit the use of peer-to-peer file-sharing services. Spyware/grayware applications may be masked as other types of files your users may want to download, such as codecs, MP3s, plug-ins, and so on.
- Periodically examine the installed software on Clients and look for applications that may be spyware/grayware. If you find an application or file that Worry-Free Business Security cannot detect as grayware but you think is a type of grayware, send it to Trend Micro:

<http://subwiz.trendmicro.com/SubWiz>

Trend Micro will analyze the files and applications you submit.

If you prefer to communicate through email, send a message to the following address:

`virusresponse@trendmicro.com`

See *Contacting Technical Support* on page 14-17 for more information.

- Keep your Windows operating systems updated with the latest patches and updates from Microsoft. See the Microsoft Web site for details.
- **Regarding protection for offline Clients:** Clients that could not connect to the Security Server, called *offline Clients*, benefit from continuous protection provided by the CSA. However, these Clients may be unable to connect to update sources in your network. To allow Clients to update when offline, ensure that they have the privilege to connect to the Trend Micro ActiveUpdate server. Clients with this privilege connect to the Trend micro server automatically when other update sources are unavailable. For more information on client privileges, see *Configuring Client Privileges* on page 5-26.

## Registration

**I have several questions on registering Worry-Free Business Security. Where can I find the answers?**

See the following Web site for frequently asked questions about registration:

<http://esupport.trendmicro.com/support/viewxml.do?ContentID=en-116326>

## Installation, Upgrade, and Compatibility

**Which versions of Worry-Free Business Security or Worry-Free Business Security Advanced can upgrade to this version of Worry-Free Business Security?**

Refer to the Trend Micro™ Worry-Free™ Business Security *Getting Started Guide* for information.

**Which Agent installation method is best for my network environment?**

Refer to *Choosing an Installation Method* on page 3-2 for a summary and brief comparison of the various Agent installation methods available.

**Can the Trend Micro Security Server be installed remotely using Citrix or Windows Terminal Services?**

Yes. The Trend Micro Security Server can be installed remotely with Citrix or Windows Terminal Services.

**Does Worry-Free Business Security support 64-bit platforms?**

Yes. A scaled down version of the Client/Server Security Agent is available for the x64 platform. However, no support is currently available for the IA-64 platform.

**Can I upgrade to Worry-Free Business Security from Trend Micro™ ServerProtect?**

No. ServerProtect will have to be first uninstalled and then Worry-Free Business Security can be installed.

## Intuit Software Protection

**What happens when an attempted Intuit update is blocked?**

All Intuit executable files have a digital signature and updates to these files will not be blocked. If there are other programs try to change the Intuit binary file, the Agent display a message with the name of the program that is attempting to update the binary files.

**Can other programs be allowed to update Intuit files? Can I bypass Trend Micro protection on a case-to-case basis?**

Yes. To allow this, add the required program to the Behavior Monitoring Exception List on the Agent.

---

**WARNING!** *Remember to remove the program from the exception list after the update.*

---

## Configuring Settings

**I have several questions on configuring Worry-Free Business Security settings. Where can I find the answers?**

You can download all Worry-Free Business Security documentation from the following site:

<http://www.trendmicro.com/download>

**What exclusions should I use for Antivirus software with SBS 2003?**

Refer to the following tables for the SBS 2003 exclusions:

**TABLE 14-1. IIS exclusions**

|                        |   |
|------------------------|---|
| IIS System Files       | C:\WINDOWS\system32\inetrv                |
| IIS Compression Folder | C:\WINDOWS\IIS Temporary Compressed Files |

**TABLE 14-2. Domain controller exclusions**

|                                 |                  |
|---------------------------------|------------------|
| Active Directory database files | C:\WINDOWS\NTDS  |
| SYVOL                           | C:\WINDOWS\SYVOL |
| NTFRS Database Files            | C:\WINDOWS\ntfrs |

**TABLE 14-3. Windows SharePoint services exclusions**

|                             |                                  |
|-----------------------------|----------------------------------|
| Temporary SharePoint folder | C:\windows\temp\FrontPageTempDir |
|-----------------------------|----------------------------------|

**TABLE 14-4. Client Desktop folder exclusions**

|                      |   |
|----------------------|---|
| Windows Update Store | C:\WINDOWS\SoftwareDistribution\DataStore |
|----------------------|---|

**TABLE 14-5. Additional exclusions**

|   |  |
|---|--|
| Removable Storage Database (used by SBS Backup) | C:\Windows\system32\NtmsData   |
| SBS POP3 connector Failed Mail                  | C:\Program Files\Microsoft Windows Small Business Server\Networking\POP3\Failed Mail |

|                                  |  |
|----------------------------------|--|
| SBS POP3 connector Incoming Mail | C:\Program Files\Microsoft Windows Small Business Server\Networking\POP3\Incoming Mail |
| Windows Update Store             | C:\WINDOWS\SoftwareDistribution\DataStore  |
| DHCP Database Store              | C:\WINDOWS\system32\dhcp   |
| WINS Database Store              | C:\WINDOWS\system32\wins   |

## Documentation

### **What documentation is available with this version of Worry-Free Business Security?**

This version of Worry-Free Business Security includes the following: *Administrator's Guide*, *Getting Started Guide*, readme file, and help files for the Web console, Master Installer, and Client/Server Security Agent.

### **Can I download the Worry-Free Business Security documentation?**

Yes. You can download the Administrator's Guide, Getting Started Guide, and readme file from the following site:

<http://www.trendmicro.com/download>

### **I have questions/issues with the documentation. How can I provide feedback to Trend Micro?**

Trend Micro is always seeking to improve its documentation. If you have questions, comments, or suggestions about this or any Trend Micro documents, please contact us at [docs@trendmicro.com](mailto:docs@trendmicro.com). Your feedback is always welcome. Please evaluate this documentation on the following site:

<http://www.trendmicro.com/download/documentation/rating.asp>

## Troubleshooting

This section helps you troubleshoot issues that may arise while using Worry-Free Business Security.

## Environments with Restricted Connections

If your environment has restrictions connecting to the Internet, in the case of a closed LAN or lack of an Internet connection, use the following procedures:

### If Agents can access the Security Server:

1. Create a new package using the Client Packager (*Client Packager* on page 13-7).
2. Manually install the package on the computer.

The Agent now applies the security settings as configured on the server.

### If Agents cannot access the Security Server:

1. Create a new package using the Client Packager (*Client Packager* on page 13-7).
2. Manually install the package on the computer.

The Client is protected but does not receive updates from the Security Server.

## Saving and Restoring Program Settings for Rollback or Reinstallation

You can save a copy of the Worry-Free Business Security database and important configuration files for rolling back your Worry-Free Business Security program. You may want to do this if you are experiencing problems and want to reinstall Worry-Free Business Security or if you want to revert to a previous configuration.

### To restore program settings after rollback or reinstallation:

1. Stop the Trend Micro Security Server Master Service.
2. Manually copy the following files and folders from the folder to an alternate location:

---

**WARNING!** Do not use backup tools or applications for this task.

---

C:\Program Files\Trend Micro\Security Server\PCSSRV

- **ofcscan.ini:** Contains global settings.

- **ous.ini**: Contains the update source table for antivirus component deployment.
  - **Private folder**: Contains firewall and update source settings.
  - **Web\TmOPP folder**: Contains Outbreak Defense settings.
  - **Pccnt\Common\OfcPfw.dat**: Contains firewall settings.
  - **Download\OfcPfw.dat**: Contains firewall deployment settings.
  - **Log folder**: Contains system events and the verify connection log.
  - **Virus folder**: The folder in which Worry-Free Business Security quarantines infected files.
  - **HTTDB folder**: Contains the Worry-Free Business Security database.
3. Uninstall Worry-Free Business Security (see *Uninstalling the Trend Micro Security Server* on page 12-6).
  4. Perform a fresh install. Refer to the Trend Micro™ Worry-Free™ Business Security *Getting Started Guide*.
  5. After the master installer finishes, stop the Trend Micro Security Server Master Service on the target computer.
  6. Update the virus pattern version from the backup file:

- a. Get current virus pattern version from the new server.

```
\Trend Micro\Security Server\PCCSRV\Private\component.ini.  
[6101]
```

```
ComponentName=Virus pattern
```

```
Version=xxxxxx 0 0
```

- b. Update the version of the virus pattern in the backed-up file:

```
\Private\component.ini
```

---

**Note:** If you change the Security Server installation path, you will have to update the path info in the backup files `ofcscan.ini` and `\private\ofcserver.ini`

---

7. With the backups you created, overwrite the Worry-Free Business Security database and the relevant files and folders on the target machine in the PCCSRV folder.

8. Restart the Trend Micro Security Server Master Service.

## Some Components are not Installed

Licenses to various components of Trend Micro products may differ by region. After installation, you will see a summary of the components your Registration Key/Activation Code allows you to use. Check with your vendor or reseller to verify the components for which you have licenses.

## Unable to Access the Web Console

This section discusses the possible causes for being unable to access the Web console.

### Browser Cache

If you upgraded from a previous version of Worry-Free Business Security, Web browser and proxy server cache files may prevent the Web console from loading. Clear the cache memory on your browser and on any proxy servers located between the Trend Micro Security Server and the computer you use to access the Web console.

### SSL Certificate

Also, verify that your Web server is functioning properly. If you are using SSL, verify that the SSL certificate is still valid. See your Web server documentation for details.

### Virtual Directory Settings

There may be a problem with the virtual directory settings if you are running the Web console on an IIS server and the following message appears:

*The page cannot be displayed  
HTTP Error 403.1 - Forbidden: Execute access is denied.  
Internet Information Services (IIS)*

This message may appear when either of the following addresses is used to access the console:

`http://<server name>/SMB/`

`http://<server name>/SMB/default.htm`

However, the console may open without any problems when using the following address:

`http://<server name>/SMB/console/html/cgi/cgichkmasterpwd.exe`

To resolve this issue, check the execute permissions of the SMB virtual directory.

**To enable scripts:**

1. Open the Internet Information Services (IIS) manager.
2. In the SMB virtual directory, select **Properties**.
3. Select the **Virtual Directory** tab and change the execute permissions to **Scripts** instead of none. Also, change the execute permissions of the Client install virtual directory.

## Incorrect Number of Clients on the Web Console

You may see that the number of Clients reflected on the Web console is incorrect.

This happens if you retain Client records in the database after removing the Agent. For example, if client-server communication is lost while removing the Agent, the server does not receive notification about the Agent removal. The server retains Client information in the database and still shows the Client icon on the console. When you reinstall the Agent, the server creates a new record in the database and displays a new icon on the console.

Use the Verify Connection feature through the Web console to check for duplicate Client records. For more information on the Verify Connection feature, refer to [Verifying Client-Server Connectivity](#) on page 11-12.

## Unsuccessful Web Page or Remote Installation

If users report that they cannot install from the internal Web page or if installation with Remote Install is unsuccessful, try the following methods.

**To verify unsuccessful installations:**

- Verify that client-server communication exists by using ping and telnet.

- Check if TCP/IP on the Client is enabled and properly configured.
- If you are using a proxy server for client-server communication, check if the proxy settings are configured correctly.
- Delete Trend Micro add-ons and browsing history.
  - a. Close and re-open Internet Explorer.
  - b. In Internet Explorer, click **Tools > Internet Options**. The **Internet Options** screen appears.
  - c. In the **Browsing History** section, click **Delete**. The **Delete Browsing History** screen appears.
  - d. Click **Delete All**. Confirm to delete files and settings stored by add-ons.
  - e. In the **Programs** tab, click **Manage add-ons**. The Manage Add-ons screen appears.
  - f. Select and delete all Trend Micro add-ons for all categories in the Show drop-down list box.

---

**Tip:** Sort entries by Publisher to group Trend Micro add-ons.

---

- g. Close the windows and restart Internet Explorer.
  - h. Start the installation. Refer to *Installing from an Internal Web Page* on page 3-6 or *Installing with Remote Install* on page 3-12 for additional instructions.
- Open a Web browser on the Client, and type `https://{Server name}:{server port} /SMB/cgi/cgionstart.exe` in the address text box, and then press ENTER. If the next screen shows "-2", this means the Client can communicate with the server. This also indicates that the problem may be in the server database; it may not have a record of the Client.
  - Verify that you have Administrator privileges to the target computer where you want to install the Agent.
  - Check if the target computer meets the minimum system requirements.
  - Check if any files have been locked.
  - If you have limited bandwidth, check if it causes connection timeout between the server and the Client.

## Client Icon Does Not Appear on Web Console after Installation

You may discover that the Client icon does not appear on the Web console after you install the Agent. This happens when the Client is unable to send its status to the server.

### To check communication between Clients and the Web console:

- Open a Web browser on the Client, type `https://{Trend Micro Security Server_Name}:{port number}/SMB/cgi/cgionstart.exe` in the address text box, and then press ENTER. If the next screen shows "-2", this means the Client can communicate with the server. This also indicates that the problem may be in the server database; it may not have a record of the Client.
- Verify that client-server communication exists by using ping and telnet.
- If you have limited bandwidth, check if it causes connection timeout between the server and the Client.
- Check if the \PCCSRV folder on the server has shared privileges and if all users have been granted full control privileges.
- Verify that the Trend Micro Security Server proxy settings are correct.

## Issues During Migration from Other Antivirus Software

This section discusses some issues you may encounter when migrating from third-party antivirus software.

The setup program for the Client/Server Security Agent utilizes the third-party software's uninstallation program to automatically remove it from your users' system and replace it with the Client/Server Security Agent. If automatic uninstallation is unsuccessful, users get the following message:

```
Uninstallation failed.
```

There are several possible causes for this error:

- The third-party software's version number or product key is inconsistent.
- The third-party software's uninstallation program is not working.
- Certain files for the third-party software are either missing or corrupted.
- The registry key for the third-party software cannot be cleaned.

- The third-party software has no uninstallation program.

There are also several possible solutions for this error:

- Manually remove the third-party software.
- Stop the service for the third-party software.
- Unload the service or process for the third-party software .

**To manually remove third-party software:**

- If the third-party software is registered to the Add/Remove Programs
  - a. Open the Control Panel.
  - b. Double-click **Add/Remove Programs**.
  - c. Select the third-party software from the list of installed programs.
  - d. Click **Remove**. Follow the on-screen instructions.
- If the third-party software is not registered to the Add/Remove Programs
  - a. Open the Windows registry.
  - b. Go to  
`HKEY_LOCAL_MACHINES\Software\Microsoft\Windows\CurrentVersion\Uninstall.`
  - c. Locate the third-party software and run the uninstall string value.
- If the third-party software's setup program is in MSI format:
  - a. Locate the product number
  - b. Verify the product number
  - c. Run the uninstall string

---

**Note:** Some product uninstallation keys are in the Product Key folder and you might have to delete them manually.

---

**To modify the startup of the service for the third-party software:**

1. Restart the computer in Safe mode.
2. Modify the service startup from automatic to manual.
3. Restart the system again.

4. Manually remove the third-party software.

**To unload the service or process for the third-party software:**

---

**WARNING!** *This procedure may cause undesirable effects to your computer if performed incorrectly. Trend Micro recommends backing up your system first.*

---

1. Unload the service for the third-party software.
2. Open the Windows registry, then locate and delete the product key.
3. Locate and delete the **Run** or **Run service** key.
4. Verify that the service registry key in  
HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services has been removed.

## Invalid/Expired Digital Signatures

In the event of a program's digital signature expiring, administrators would need to update the signature. Refer to the following link to update digital signatures:

<http://technet.microsoft.com/en-us/library/bb457160.aspx>

Or, contact the vendor of the program.

## Trend Micro Security Information Center

Comprehensive security information is available over the Internet, free of charge, on the Trend Micro Security Information Web site:

<http://www.trendmicro.com/vinfo>

Visit the Security Information site to:

- Read the Weekly Virus Report, which includes a listing of threats expected to trigger in the current week and describes the 10 most prevalent threats around the globe for the current week.
- View a Virus Map of the top 10 threats around the globe.
- Consult the Virus Encyclopedia, a compilation of known threats including risk rating, symptoms of infection, susceptible platforms, damage routine, and

instructions on how to remove the threat, as well as information about computer hoaxes.

- Download test files from the European Institute of Computer Anti-virus Research (EICAR), to help you test whether your security product is correctly configured.
- Read general virus/malware information, such as:
  - The Virus Primer, which helps you understand the difference between virus/malware, Trojans, worms, and other threats
  - The Trend Micro *Safe Computing Guide*
  - A description of risk ratings to help you understand the damage potential for a threat rated Very Low or Low vs. Medium or High risk
  - A glossary of virus/malware and other security threat terminology
- Download comprehensive industry white papers
- Subscribe to Trend Micro's Virus Alert service to learn about outbreaks as they happen and the Weekly Virus Report
- Learn about free virus/malware update tools available to Web masters
- Read about TrendLabs<sup>SM</sup>, Trend Micro's global antivirus research and support center

## Known Issues

Known issues are features in Worry-Free Business Security software that may temporarily require a workaround. Known issues are typically documented in the Readme document you received with your product. Readme files for Trend Micro products can also be found in the Trend Micro Update Center:

<http://www.trendmicro.com/download>

Known issues can be found in the technical support Knowledge Base:

<http://esupport.trendmicro.com/support/>

Trend Micro recommends that you always check the Readme text for information on known issues that could affect installation or performance, as well as a description of what is new in a particular release, system requirements, and other tips.

## Contacting Trend Micro

Trend Micro has sales and corporate offices in many cities around the globe. For global contact information, visit the Trend Micro Worldwide site:

[http://us.trendmicro.com/us/about/contact\\_us](http://us.trendmicro.com/us/about/contact_us)

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**Note:** The information on this Web site is subject to change without notice.

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## Trend Micro Support

Trend Micro Support can help you resolve queries relating to your Trend Micro products. Most queries have already been answered on the Knowledge Base (refer *Knowledge Base* on page 14-16 for more information). If you cannot find your answer on the Knowledge Base, you can contact Trend Micro Technical Support for further assistance (refer *Contacting Technical Support* on page 14-17 for more information).

## Knowledge Base

The Trend Micro Knowledge Base is an online resource that contains thousands of do-it-yourself technical support procedures for Trend Micro products. Use the Knowledge Base, for example, if you are getting an error message and want to find out what to do. New solutions are added daily.

Also available in the Knowledge Base are product FAQs, tips, advice on preventing virus/malware infections, and regional contact information for support and sales.

The Knowledge Base can be accessed by all Trend Micro customers as well as anyone using an evaluation version of a product. Visit:

<http://esupport.trendmicro.com/support/smb/search.do>

## Contacting Technical Support

When you contact Trend Micro Technical Support, to speed up your problem resolution, run the Case Diagnostic Tool (refer *Using the Case Diagnostic Tool* on page 14-17) or ensure that you have the following details available:

- Operating system
- Network type
- Brand and model of the computer and connected hardware
- Amount of memory and free hard disk space on your machine
- Detailed description of the installation environment
- Exact text of any error message
- Steps to reproduce the problem

### To contact Trend Micro Technical Support:

1. Run the Case Diagnostic Tool. For more information, refer *Using the Case Diagnostic Tool* on page 14-17.

- Visit the following URL:

[http://us.trendmicro.com/us/about/contact\\_us](http://us.trendmicro.com/us/about/contact_us)

Click the link for the required region. Follow the instructions for contacting support in your region.

- If you prefer to communicate by email message, send a query to the following address:

[virusresponse@trendmicro.com](mailto:virusresponse@trendmicro.com)

- In the United States, you can also call the following toll-free telephone number:

**(877) TRENDAY, or 877-873-6328**

## Using the Case Diagnostic Tool

Use the Case Diagnostic Tool to collect Trend Micro software settings and environment setup specifications from the computer. This information is used to troubleshoot problems related to the software.

Download the Case Diagnostic Tool from:

<http://www.trendmicro.com/download/product.asp?productid=25>

## Sending Suspicious Files to Trend Micro

You can send your virus/malware, infected files, Trojans, suspected worms, and other suspicious files to Trend Micro for evaluation. To do so, contact your support provider or visit the Trend Micro Submission Wizard URL:

<http://subwiz.trendmicro.com/SubWiz>

Click the link under the type of submission you want to make.

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**Note:** Submissions made through the submission wizard/virus doctor are addressed promptly and are not subject to the policies and restrictions set forth as part of the Trend Micro Virus Response Service Level Agreement.

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When you submit your case, an acknowledgement screen displays. This screen also displays a case number. Make note of the case number for tracking purposes.

## About TrendLabs

TrendLabs is Trend Micro's global infrastructure of antivirus research and product support centers that provide up-to-the minute security information to Trend Micro customers.

The "virus doctors" at TrendLabs monitor potential security risks around the world to ensure that Trend Micro products remain secure against emerging threats. The daily culmination of these efforts are shared with customers through frequent virus pattern file updates and scan engine refinements.

TrendLabs is staffed by a team of several hundred engineers and certified support personnel that provide a wide range of product and technical support services. Dedicated service centers and rapid-response teams are located in Tokyo, Manila, Taipei, Munich, Paris, and Lake Forest, CA, to mitigate virus outbreaks and provide urgent support 24x7.

TrendLabs' modern headquarters, in a major Metro Manila IT park, has earned ISO 9002 certification for its quality management procedures in 2000—one of the first antivirus research and support facilities to be so accredited. Trend Micro believes TrendLabs is the leading service and support team in the antivirus industry.

## About Trend Micro

Trend Micro, Inc. is a global leader in network antivirus and Internet content security software and services. Founded in 1988, Trend Micro led the migration of virus protection from the desktop to the network server and the Internet gateway, gaining a reputation for vision and technological innovation along the way.

Today, Trend Micro focuses on providing customers with comprehensive security strategies to manage the impact of threats to information by offering centrally controlled, server-based virus protection and content-filtering products and services. By protecting information that flows through Internet gateways, email servers, and file servers, Trend Micro enables companies and service providers worldwide to stop virus/malware and other malicious code from a central point, before they ever reach the desktop.

To make this possible, TrendLabs, a global network of antivirus research and product support centers, provides continuous 24 x 7 coverage to Trend Micro customers around the world. TrendLabs' modern headquarters has earned ISO 9002 certification for its quality management procedures—one of the first antivirus research and support facilities to be so accredited. We believe TrendLabs is the leading service and support team in the antivirus industry.

Trend Micro is headquartered in Tokyo, Japan, with business units in North and South America, Europe, Asia, and Australia—a global organization with more than 3,000 employees in 25 countries.

For more information, or to download evaluation copies of Trend Micro products, visit our award-winning Web site:

<http://www.trendmicro.com>



## System Checklists

Use the checklists in this appendix to record relevant system information as a reference.

### Ports Checklist

Worry-Free Business Security uses the following default ports.

**TABLE 1-1. Port Checklist**

| PORT                         | SAMPLE                | YOUR VALUE |
|------------------------------|-----------------------|------------|
| SMTP                         | 25                    |            |
| Proxy                        | Administrator Defined |            |
| Security Server              | 8059                  |            |
| Web console                  | 4343                  |            |
| Trend Micro Security Server  | 8080                  |            |
| Client/Server Security Agent | 21112                 |            |

## Server Address Checklist

Worry-Free Business Security requires the following information during installation and during configuration. Record these details for easy reference.

**TABLE 1-2. Server Address Checklist**

| INFORMATION REQUIRED   | SAMPLE             | YOUR VALUE |
|--|--------------------|------------|
| <b>Trend Micro Security Server information</b>                     |                    |            |
| IP address   | 192.168.1.1        |            |
| Fully Qualified Domain Name (FQDN)                                 | server.company.com |            |
| NetBIOS (host) name  | yourserver         |            |
| <b>Web server information</b>                                      |                    |            |
| IP address   | 192.168.1.1        |            |
| Fully Qualified Domain Name (FQDN)                                 | server.company.com |            |
| NetBIOS (host) name  | yourserver         |            |
| <b>Proxy server for component download</b>                         |                    |            |
| IP address   | 192.168.1.1        |            |
| Fully Qualified Domain Name (FQDN)                                 | proxy.company.com  |            |
| NetBIOS (host) name  | proxyserver        |            |
| <b>SMTP server information (Optional; for email notifications)</b> |                    |            |
| IP address   | 192.168.1.1        |            |
| Fully Qualified Domain Name (FQDN)                                 | mail.company.com   |            |
| NetBIOS (host) name  | mailserver         |            |

---

**TABLE 1-2. Server Address Checklist**

| <b>INFORMATION REQUIRED</b>  | <b>SAMPLE</b> | <b>YOUR VALUE</b> |
|--|---------------|-------------------|
| <b>SNMP Trap information (Optional; for SNMP Trap notifications)</b> |               |                   |
| Community name   | company       |                   |
| IP address   | 192.168.1.1   |                   |



## Trend Micro Product Exclusion List

This product exclusion list contains all of the Trend Micro products that are, by default, excluded from scanning.

**TABLE 2-1. Trend Micro product exclusion list**

| Product Name  | Installation Path Location  |
|---|---|
| InterScan eManager 3.5x   | HKEY_LOCAL_MACHINE\SOFTWARE\TrendMicro\InterScan eManager\CurrentVersion<br>ProgramDirectory=                               |
| ScanMail eManager (ScanMail for Microsoft Exchange eManager)<br>3.11, 5.1, 5.11, 5.12 | HKEY_LOCAL_MACHINE\SOFTWARE\TrendMicro\ScanMail for Microsoft Exchange eManager\CurrentVersion<br>ProgramDirectory=         |
| ScanMail for Lotus Notes (SMLN) eManager NT   | HKEY_LOCAL_MACHINE\SOFTWARE\TrendMicro\ScanMail for Lotus Notes\CurrentVersion<br>AppDir=<br>DataDir=<br>IniDir=            |
| InterScan Web Security Suite (IWSS)   | HKEY_LOCAL_MACHINE\Software\TrendMicro\InterScan Web Security Suite<br>Program Directory= C:\Program Files\Trend Micro\IWSS |
| InterScan WebProtect  | HKEY_LOCAL_MACHINE\SOFTWARE\TrendMicro\InterScan WebProtect\CurrentVersion<br>ProgramDirectory=                             |

**TABLE 2-1. Trend Micro product exclusion list**

| Product Name               | Installation Path Location   |
|----------------------------|--|
| InterScan FTP VirusWall    | HKEY_LOCAL_MACHINE<br>SOFTWARE\TrendMicro\ InterScan FTP<br>VirusWall\CurrentVersion<br>ProgramDirectory=  |
| InterScan Web VirusWall    | HKEY_LOCAL_MACHINE<br>SOFTWARE\TrendMicro\ InterScan Web<br>VirusWall\CurrentVersion<br>ProgramDirectory=  |
| InterScan E-Mail VirusWall | HKEY_LOCAL_MACHINE<br>SOFTWARE\TrendMicro\ InterScan E-Mail<br>VirusWall\CurrentVersion<br>ProgramDirectory={Installation Drive}\\INTERS~1                 |
| InterScan NSAPI Plug-In    | HKEY_LOCAL_MACHINE<br>SOFTWARE\TrendMicro\ InterScan NSAPI<br>Plug-In\CurrentVersion<br>ProgramDirectory=  |
| InterScan E-Mail VirusWall | HKEY_LOCAL_MACHINE<br>SOFTWARE\TrendMicro\ InterScan E-Mail<br>VirusWall \CurrentVersion<br>ProgramDirectory=  |
| IM Security (IMS)          | HKEY_LOCAL_MACHINE\SOFTWARE\TrendMicro<br>\IM Security\CurrentVersion<br>HomeDir=<br>VSQuarantineDir=<br>VSBBackupDir=<br>FBArchiveDir=<br>FTCFArchiveDir= |

<http://support.microsoft.com/kb/245822/>

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## Trend Micro Services

The topics discussed in this chapter include:

- *Trend Micro Outbreak Prevention Policy* on page C-2
- *Trend Micro Damage Cleanup Services* on page C-2
- *Trend Micro Vulnerability Assessment* on page C-3
- *Trend Micro IntelliScan* on page C-4
- *Trend Micro ActiveAction* on page C-4
- *Trend Micro IntelliTrap* on page C-5
- *Trend Micro Web Threat Protection* on page C-7

## Trend Micro Outbreak Prevention Policy

The Trend Micro Outbreak Prevention Policy is a set of Trend Micro recommended default security configuration settings that are applied in response to an outbreak on the network.

The Outbreak Prevention Policy is downloaded from Trend Micro to the Trend Micro Security Server.

When the Trend Micro Security Server detects an outbreak, it determines the degree of the outbreak and immediately implements the appropriate security measures as stated in the Outbreak Prevention Policy.

Based on the Outbreak Prevention Policy, Automatic Threat Response takes the following preemptive steps to secure your network in the event of an outbreak:

- Blocks shared folders to help prevent virus/malware from infecting files in shared folders
- Blocks ports to help prevent virus/malware from using vulnerable ports to infect files on the network and Clients
- Denies write access to files and folders to help prevent virus/malware from modifying files
- Displays an alert message on Clients when an outbreak detected

## Trend Micro Damage Cleanup Services

Worry-Free Business Security uses Damage Cleanup Services (DCS) to protect your Windows computers against Trojans (or Trojan horse programs) and virus/malware.

### The Damage Cleanup Services Solution

To address the threats posed by virus/malware or spyware/grayware, DCS does the following:

- Detects and removes threats
- Kills processes that threats create
- Repairs system files that threats modify
- Deletes files and applications that threats create

---

To accomplish these tasks, DCS makes use of these components:

- **Virus Cleanup Engine:** The engine Damage Cleanup Services uses to scan for and remove threats and its associated processes.
- **Virus Cleanup Template:** Used by the Virus Cleanup Engine, this template helps identify threats and its associated processes so the engine can eliminate them.

In Worry-Free Business Security, DCS runs on the Client on these occasions:

- Users perform a manual cleanup from the Agent console.
- Administrators perform Cleanup Now on the Client from the Web console.
- Users run Manual or Scheduled Scan.
- After hot fix or patch deployment (see for more information).
- When the Worry-Free Business Security service is restarted (the Worry-Free Business Security Client Watchdog service must be selected to restart the Agent automatically if the Agent unexpectedly terminates. Enable this feature on the **Global Client Settings** screen. Refer to *Watchdog Settings* on page 11-9 for details.).

Because DCS runs automatically, you do not need to configure it. Users are not even aware when it is executed because it runs in the background (when the Agent is running). However, Worry-Free Business Security may sometimes notify the user to restart their Client to complete the process of removing threats.

## Trend Micro Vulnerability Assessment

Vulnerability Assessment provides system Administrators the ability to assess security risks to their networks. The information they generate by using Vulnerability Assessment gives them a clear guide as to how to resolve known vulnerabilities and secure their networks.

Use Vulnerability Assessment to:

- Configure tasks that scan any or all computers attached to a network. Scans can search for single vulnerabilities or a list of all known vulnerabilities.
- Run manual assessment tasks or set tasks to run according to a schedule.
- Request blocking for computers that present an unacceptable level of risk to network security.

- Create reports that identify vulnerabilities according to individual computers and describe the security risks those computers present to the overall network. The reports identify the vulnerability according to standard naming conventions so that Administrators can research further to resolve the vulnerabilities and secure the network.
- View assessment histories and compare reports to better understand the vulnerabilities and the changing risk factors to network security.

## Trend Micro IntelliScan

IntelliScan is a new method of identifying files to scan. For executable files (for example, .exe), the true file type is determined based on the file content. For non-executable files (for example, .txt), the true file type is determined based on the file header.

Using IntelliScan provides the following benefits:

- **Performance optimization:** IntelliScan does not affect applications on the Client because it uses minimal system resources
- **Shorter scanning period:** Because IntelliScan uses true file type identification, it only scans files that are vulnerable to infection. The scan time is therefore significantly shorter than when you scan all files.

## Trend Micro ActiveAction

Different types of virus/malware require different scan actions. Customizing scan actions for different types of virus/malware requires knowledge about virus/malware and can be a tedious task. Trend Micro uses ActiveAction to counter these issues.

ActiveAction is a set of pre-configured scan actions for virus/malware and other types of threats. The recommended action for virus/malware is Clean, and the alternative action is Quarantine. The recommended action for Trojans and joke programs is Quarantine.

If you are not familiar with scan actions or if you are not sure which scan action is suitable for a certain type of virus/malware, Trend Micro recommends using ActiveAction.

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Using ActiveAction provides the following benefits:

- **Time saving and easy to maintain:** ActiveAction uses scan actions that are recommended by Trend Micro. You do not have to spend time configuring the scan actions.
- **Updateable scan actions:** Virus writers constantly change the way virus/malware attack computers. To help ensure that Clients are protected against the latest threats and the latest methods of virus/malware attacks, new ActiveAction settings are updated in virus pattern files.

## Default ActiveAction Settings

The default ActiveAction settings for the following threats are:

**TABLE 3-1. Default ActiveAction Settings**

| Threat                 | Action     | Action for Uncleanable Threats |
|------------------------|------------|--------------------------------|
| Possible virus/malware | No action  | Not Applicable                 |
| Joke                   | Quarantine | Not Applicable                 |
| Other Threats          | Clean      | Quarantine                     |
| Packer                 | Quarantine | Not Applicable                 |
| Test virus             | Pass       | Not Applicable                 |
| Virus                  | Clean      | Quarantine                     |
| Worm/Trojans           | Quarantine | Not Applicable                 |

---

**Note:** Future pattern files could update the default actions.

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## Trend Micro IntelliTrap

IntelliTrap is Trend Micro's heuristic technology used to discover threats that use Real-Time Compression paired with other malware characteristics like packers. This covers virus/malware, worms, trojans, backdoors and bots. Virus writers often

attempt to circumvent virus/malware filtering by using different file compression schemes. IntelliTrap is a real-time, rule-based, and pattern recognition scan engine technology that detects and removes known virus/malware in files compressed up to six layers deep using any of 16 popular compression types.

IntelliTrap uses the following components when checking for bots and other malicious programs:

- Trend Micro virus scan engine and pattern file
- IntelliTrap pattern and exception pattern

## True File Type

When set to scan the "true file type", the scan engine examines the file header rather than the file name to ascertain the actual file type. For example, if the scan engine is set to scan all executable files and it encounters a file named "family.gif," it does not assume the file is a graphic file. Instead, the scan engine opens the file header and examines the internally registered data type to determine whether the file is indeed a graphic file, or, for example, an executable that someone named to avoid detection.

True file type scanning works in conjunction with IntelliScan to scan only those file types known to be of potential danger. These technologies can mean a reduction in the overall number of files that the scan engine must examine (perhaps as much as a two-thirds reduction), but with this reduction comes a potentially higher risk.

For example, .gif files make up a large volume of all Web traffic, but they are unlikely to harbor virus/malware, launch executable code, or carry out any known or theoretical exploits. Therefore, does this mean they are safe? Not entirely. It is possible for a malicious hacker to give a harmful file a "safe" file name to smuggle it past the scan engine and onto the network. This file could cause damage if someone renamed it and ran it.

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**Tip:** For the highest level of security, Trend Micro recommends scanning all files.

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## Trend Micro Web Threat Protection

Web Threat Protection helps prevent access to URLs that pose potential security risks by checking any requested URL against the Trend Micro Web Security database. Depending on the location (In Office/Out of Office) of the Client, configure a different level of security.

If Web Threat Protection blocks a URL and you feel the URL is safe, add the URL to the Approved URLs list. For information on adding a URL to the Approved URL list, refer to *Web Threat Protection* on page 11-7 for more details.



## Client Information






Worry-Free Business Security differentiates Clients according to the following:

- Normal or Roaming Clients
- 32-bit or 64-bit Clients






Normal Clients are computers that have the Client/Server Security Agent installed and are stationary computers that maintain a continuous network connection with the Trend Micro Security Server.

Icons that appear in a Client's system tray indicate the status of the Normal Client. Refer to Table 4-1 for a list of icons that appear on the Normal Client.

**TABLE 4-1. Icons that appear on a Normal Client**

| Icon  | Description   | Real-time Scan |
|---|---|----------------|
|  | Normal Client   | Enabled        |
|  | Pattern file is outdated                                    | Enabled        |
|  | Scan Now, Manual Scan, or Scheduled Scan is running         | Enabled        |
|  | Real-time Scan is disabled                                  | Disabled       |
|  | Real-time Scan is disabled and the pattern file is outdated | Disabled       |

**TABLE 4-1. Icons that appear on a Normal Client**

| Icon  | Description   | Real-time Scan |
|---|---|----------------|
|  | Real-time Scan Service is not running (red icon)                                  | Disabled       |
|  | Real-time Scan Service is not running and the pattern file is outdated (red icon) | Disabled       |
|  | Disconnected from the server  | Enabled        |
|  | Disconnected from the server and the pattern file is outdated                     | Enabled        |
|  | Disconnected from the server and Real-time Scan is disabled                       | Disabled       |

## Roaming Clients

Administrators can assign roaming mode privileges to Clients, allowing users to place these Clients into roaming mode. Clients in roaming mode, called *roaming clients*, are still protected; however, they do not receive messages from the server and are only able to update in the following circumstances:


- When the user performs Update Now or performs a Scheduled Update.
- When the Agent connects to the Trend Micro Security Server.

If you use a computer for functions that should not be interrupted by server commands, ensure that you give the CSA on that computer roaming mode privileges.






For more information on how to change client privileges, see [Client Privileges](#) on page 5-25.

The status of a Roaming Client is indicated by icons that appear in its system tray. Refer to Table 4-2 for a list of icons that appear on Roaming Clients.

**TABLE 4-2. Icons that appear on a Roaming Client**

| Icon  | Description                | Real-time Scan |
|---|----------------------------|----------------|
|  | Roaming Client (blue icon) | Enabled        |





















**TABLE 4-2. Icons that appear on a Roaming Client**

| Icon  | Description   | Real-time Scan |
|---|---|----------------|
|  | Real-time Scan is disabled  | Disabled       |
|  | Pattern file is outdated  | Enabled        |
|  | Real-time Scan is disabled and the pattern file is outdated                       | Disabled       |
|  | Real-time Scan Service is not running (red icon)                                  | Disabled       |
|  | Real-time Scan Service is not running and the pattern file is outdated (red icon) | Disabled       |























## 32-bit and 64-bit Clients

The Client/Server Security Agent supports Windows Vista/XP/Server 2003 computers that use x86 processor architecture and x64 processor architecture. Table 4-3 shows a comparison between Worry-Free Business Security features for 32-bit and 64-bit Clients:

**TABLE 4-3. 32-bit and 64-bit Client Features Comparison**

| Feature   | 32-bit Clients  | 64-bit Clients  | Vista 32-bit Clients  | Vista 64-bit Clients  |
|---|---|---|---|---|
| Manual, Real-time, and Scheduled Scan for virus/malware and other threats |  |  |  |  |
| Roaming mode  |  |  |  |  |
| Damage Cleanup Services   |  |  |  |  |
| Anti-spyware  |  |  |  |  |
| Firewall  |  |  |  |  |

**TABLE 4-3. 32-bit and 64-bit Client Features Comparison**

| Feature   | 32-bit Clients  | 64-bit Clients  | Vista 32-bit Clients  | Vista 64-bit Clients   |
|---|---|---|---|--|
| POP3 Mail Scan  |  |  |  |  |
| Outbreak Prevention Policy                                    |  |  |  |  |
| Watchdog  |  |  |  |  |
| Manual Scan from the Windows shortcut menu                    |  |  |  |  |
| Anti-Rootkit  |  | N/A   |  | N/A  |
| Client/Server Security Agent installation using login scripts |  |  |  |  |

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**Note:** Client/Server Security Agent does not support the Itanium 2 Architecture (IA-64).

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## Spyware/Grayware Types

The Trend Micro anti-spam engine can detect 21 types of spyware/grayware. The following table identifies these spyware/grayware types and provides a threat description for each type. These spyware/grayware types may appear in the **Spyware/Grayware Type** column on the **Spyware/Grayware Log Details** screen.

| Spyware/Grayware Type        | Threat Description   |
|------------------------------|--|
| <b>Adware</b>                | Adware is a type of software that displays advertisements on the computer screen. Typically, adware is built into software that performs some other primary task such as file sharing.<br><br>The justification for adware is for the software developer to recover revenue through advertising instead of, for instance, charging for their software. Some Adware will collect the computers usage information (for example, sites visited) and send it up to a remote server on the Internet where it is collected and processed for marketing purposes. |
| <b>Browser Helper Object</b> | A type of module that acts as a plugin to a browser. Some browser helper objects may monitor or manipulate your browsing experience.   |
| <b>Browser Hijacker</b>      | A type of software that changes settings in your Web browser. This often includes changing your browser's default home page.   |

| <b>Spyware/Grayware Type</b>         | <b>Threat Description</b>   |
|--------------------------------------|---|
| <b>Cookie</b>                        | <p>Cookies are small files that are created when you visit sites on the Internet. Typically, they are used as a convenience to remember frequently used information that is required for access to a particular Web site. They can also be used to track your visits to certain Web sites and can provide companies with information about frequency of visits and other profile information. The user is usually not aware that their surfing habits are being tracked.</p> <p>Trend Micro Anti-Spyware identifies cookies that are created by the most common advertising companies and allows you to clean them, which helps to ensure your privacy while surfing.</p> |
| <b>CoolWebSearch Variant</b>         | A particularly complex set of Browser Hijacker variants.  |
| <b>Dialer</b>                        | A program that usually configures some sort of dial up configuration such as a dial-up-networking connection in Windows. The user either knowingly or unknowingly will end up using the dialer that calls a time-charged number that is usually billed to your credit card.   |
| <b>Downloader</b>                    | Software that manages the download of malicious software onto computers.  |
| <b>EULAware</b>                      | <p>Software that contains a non-standard or questionable End User License Agreement. For example, a license agreement that states the software or license may be updated without first notifying the user and that the user agrees to any future changes made to the software and/or license agreement.</p> <p>EULAware may broadly permit the software to transmit any type of information to a server, including information unrelated to the function of the software application.</p>   |
| <b>General</b>                       | The threat type is not known, or is not yet classified.   |
| <b>Keylogger/Monitoring Software</b> | A type of software can be either commercially sold or may be installed inadvertently through the Internet. This software can allow people to monitor your keystrokes, your computer screen, and other personal actions.   |
| <b>Layered Service Provider</b>      | A type of module that acts as a plugin to your Network System. LSPs usually have low level access to your network and Internet data.  |
| <b>Parasite</b>                      | A type of software that piggybacks onto other software. This type of software may be installed without the user's knowledge or consent.   |
| <b>Peer To Peer</b>                  | Software that allows users to exchange shared files over the Internet. Some of the files could be malicious.  |
| <b>Security Weakness</b>             | A medium/high risk security weakness that exists on your computer that could be used to compromise your systems security.   |

| <b>Spyware/Grayware Type</b> | <b>Threat Description</b>   |
|------------------------------|---|
| <b>Suspect</b>               | This item is suspect, because Trend Micro Anti-Spyware detected some characteristics that match a known spyware/grayware.   |
| <b>Trackware</b>             | Trackware is a generic term that describes software that collects a computers demographic and usage information and sends it to some remote server through the Internet, where it can be used by other people in a variety of different ways including marketing.   |
| <b>Trojan</b>                | A type of software that is installed unknowingly, usually as a result of installing some other software, or viewing an email. Since it exists as a software program on the computer, the range of activity of a Trojan can be quite broad, from usage monitoring to remote control to customized collection and theft of information. |
| <b>URL Shortcut</b>          | A shortcut to a malicious Web site that exists in your Internet browser or your desktop.  |
| <b>Virus/malware</b>         | Software that propagates itself by attaching to other valid programs, or by existing as a separate program.   |
| <b>Worm</b>                  | A self-contained program (or set of programs) that is able to spread functional copies of itself or its segments to other computer systems, often through email. A worm can also be called a network virus.   |



## Glossary of Terms

The following is a list of terms in this document:

| Term                          | Description   |
|-------------------------------|---|
| <b>ActiveUpdate</b>           | Connected to the Trend Micro update Web site, ActiveUpdate provides updated downloads of components such as the virus pattern files, scan engines, and program files. ActiveUpdate is a function common to many Trend Micro products.   |
| <b>ActiveX malicious code</b> | A type of virus that resides in Web pages that execute ActiveX controls.  |
| <b>Administrator</b>          | The person in an organization who is responsible for activities such as setting up new hardware and software, allocating user names and passwords, monitoring disk space and other IT resources, performing backups, and managing network security.                                       |
| <b>Administrator account</b>  | A user name and password that has Administrator-level privileges.   |
| <b>boot sector virus</b>      | A sector is a designated portion of a disk (the physical device on which data is written and read). The boot sector contains the data used by your computer to load and initialize the computer's operating system. A boot sector virus infects the boot sector of a partition or a disk. |
| <b>bots</b>                   | A bot (short for "robot") is a program that operates as an agent for a user or another program or simulates a human activity. Bots, once executed, can replicate, compress, and distribute copies of themselves.  |

| <b>Term</b>                                  | <b>Description</b>   |
|--|--|
| <b>clean</b>                                 | To remove virus code from a file or message.   |
| <b>Cleanup</b>                               | Cleanup detects and removes Trojans and applications or processes installed by Trojans. It repairs files modified by Trojans.  |
| <b>client</b>                                | A computer system or process that requests a service of another computer system or process (a "server") using some kind of protocol and accepts the server's responses. A client is part of a client-server software architecture. Note that the online help uses the term "Client" in a special way to refer to computers that form a client-server relationship to the Worry-Free Business Security main program, the Security Server. |
| <b>Clients</b>                               | Clients are desktops, portable computers, and servers where a Client/Server Security Agent is installed.   |
| <b>compressed file</b>                       | A single file containing one or more separate files plus information to allow them to be extracted by a suitable program, such as WinZip.  |
| <b>COM and EXE file infectors</b>            | A type of virus that masquerades as an application by using a .exe or .com file extension.   |
| <b>configuration</b>                         | Selecting options for how your Trend Micro product will function, for example, selecting whether to quarantine or delete a virus-infected email message.   |
| <b>default</b>                               | A value that pre-populates a field in the Web console. A default value represents a logical choice and is provided for convenience. Use default values as preset by Trend Micro or customize them as required.   |
| <b>Denial of Service Attack (DoS Attack)</b> | An attack on a computer or network that causes a loss of 'service', namely a network connection. Typically, DoS attacks negatively affect network bandwidth or overload computer resources, such as memory.  |
| <b>domain name</b>                           | The full name of a system, consisting of its local host name and its domain name, for example, example.com. A domain name should be sufficient to determine the unique IP address for any host on the Internet. This process, called "name resolution", uses the Domain Name System (DNS).   |
| <b>Dynamic Host Control Protocol (DHCP)</b>  | A device, such as a computer or switch, must have an IP address to be connected to a network, but the address does not have to be static. A DHCP server, using the Dynamic Host Control Protocol, can assign and manage IP addresses dynamically every time a device connects to a network.  |
| <b>encryption</b>                            | <p>Encryption is the process of changing data into a form that can be read only by the intended receiver. To decipher the message, the receiver of the encrypted data must have the proper decryption key. Agents cannot scan encrypted files.</p> <p>Real-Time Scan will scan the encrypted or password protected file when it is decrypted.</p>  |

| <b>Term</b>                               | <b>Description</b>  |
|---|---|
| <b>End User License Agreement (EULA)</b>  | <p>An End User License Agreement, or EULA, is a legal contract between a software publisher and the software user. It typically outlines restrictions on the side of the user, who can refuse to enter into the agreement by not clicking "I accept" during installation. Clicking "I do not accept" will, of course, end the installation of the software product.</p> <p>Many users inadvertently agree to the installation of spyware/grayware and other types of grayware into their computers when they click "I accept" on EULA prompts displayed during the installation of certain free software.</p> |
| <b>Exceptions</b>                         | <p>Exceptions, in relation to the Firewall, are a list of ports and communication protocols that will not be blocked by the Firewall. Exceptions also describe the ports that you have set so that they are never blocked during Outbreak Defense protection measures.</p>  |
| <b>false positives</b>                    | <p>A false positive occurs when a Web site, URL, or "infected" file is incorrectly determined by filtering software to be of an unwanted type. For example, a legitimate email between colleagues may be detected as spam if a job-seeking filter does not distinguish between resume (to start again) and résumé (a summary of work experience).</p>   |
| <b>file name extension</b>                | <p>The portion of a file name (such as .dll or .xml) which indicates the kind of data stored in the file. Apart from informing the user what type of content the file holds, file name extensions are typically used to decide which program to launch when a file is run.</p>  |
| <b>File Transfer Protocol (FTP)</b>       | <p>FTP is a standard protocol used for transporting files from a server to a client.</p>  |
| <b>file type</b>                          | <p>The kind of data stored in a file. Most operating systems use the file name extension to determine the file type. The file type is used to choose an appropriate icon to represent the file in a user interface, and the correct application with which to view, edit, run, or print the file.</p>   |
| <b>firewall</b>                           | <p>Firewalls create a barrier between the Internet and your local network to protect the local network from hacker attacks and network virus. Firewalls examine data packet to determine if they are infected with a network virus.</p>   |
| <b>Fully Qualified Domain Name (FQDN)</b> | <p>An FQDN consists of a host and domain name, including top-level domain. For example, www.trendmicro.com is a fully qualified domain name: www is the host, trendmicro is the second-level domain, and .com is the top-level domain.</p>  |
| <b>grayware</b>                           | <p>Files and programs, other than virus/malware, that can negatively affect the performance of the computers on your network. These include spyware/grayware, adware, dialers, joke programs, hacking tools, remote access tools, password cracking applications, and others. The Worry-Free Business Security scan engine scans for grayware as well as virus/malware.</p>   |
| <b>hot fixes and patches</b>              | <p>Workaround solutions to customer related problems or newly discovered security vulnerabilities that you can download from the Trend Micro Web site and deploy to the Worry-Free Business Security server and/or Agents.</p>  |

| <b>Term</b>                                | <b>Description</b>  |
|--|---|
| <b>Hyper Text Transfer Protocol (HTTP)</b> | HTTP is a standard protocol used for transporting Web pages (including graphics and multimedia content) from a server to a client over the Internet.  |
| <b>HTTPS</b>                               | Hypertext Transfer Protocol using Secure Socket Layer (SSL).  |
| <b>IntelliScan</b>                         | IntelliScan is a Trend Micro scanning technology that optimizes performance by examining file headers using true file type recognition and scanning only file types known to potentially harbor malicious code. True file type recognition helps identify malicious code that can be disguised by a harmless extension name.                              |
| <b>Internet Protocol (IP)</b>              | Internet Protocol is a standardized method of transporting information across the Internet in packets of data. It is often linked to Transmission Control Protocol, which assembles the packets once they have been delivered to the intended location.   |
| <b>Intrusion Detection System (IDS)</b>    | Intrusion Detection Systems are commonly part of firewalls. An IDS can help identify patterns in network packets that may indicate an attack on a Client.   |
| <b>local</b>                               | The term "local" refers to a computer on which you are directly installing or running software, as opposed to a "remote" computer which is physically distant and/or connected to your computer through a network.  |
| <b>macro virus</b>                         | A type of virus encoded in an application macro and often included in a document.   |
| <b>malware</b>                             | A malware is a program that performs unexpected or unauthorized actions. It is a general term used to refer to virus, Trojans, and worms. Malware, depending on their type, may or may not include replicating and non replicating malicious code.  |
| <b>message body</b>                        | The content of an email message.  |
| <b>Network virus</b>                       | A virus that uses network protocols, such as TCP, FTP, UDP, HTTP, and email protocols to replicate. They often do not alter system files or modify the boot sectors of hard disks. Instead, a network virus infects the memory of computers, forcing them to flood the network with traffic, which can cause slowdowns and even complete network failure. |
| <b>Notifications</b>                       | The Security Server can send Administrators a notification whenever significant abnormal events occur on your Clients. For example, you can set up a condition that whenever the Client/Server Security Agent detects 40 virus/malware within one hour, the Security Server will send a notification to the Administrator.                                |

| <b>Term</b>                          | <b>Description</b>   |
|--------------------------------------|--|
| <b>Outbreak Defense</b>              | During Outbreak Defense, the Security Server enacts the instructions contained in the Outbreak Prevention Policy. A Trend Micro Outbreak Prevention Policy is a set of recommended default security configurations and settings designed by Trend Micro to give optimal protection to your computers and network during outbreak conditions. The Security Server downloads an Outbreak Prevention Policy from Trend Micro ActiveUpdate Server every 30 minutes or whenever the Security Server starts up. Outbreak Defense enacts preemptive measures such as blocking shared folders, blocking ports, updating components, and running scans. |
| <b>pattern matching</b>              | Since each virus contains a unique "signature" or string of telltale characters that distinguish it from any other code, the virus experts at Trend Micro capture inert snippets of this code in the pattern file. The engine then compares certain parts of each scanned file to the pattern in the virus pattern file, looking for a match. When the engine detects a match, a virus has been detected and an email notification is sent to the Administrator.   |
| <b>phishing incident</b>             | A Phishing incident starts with an email message that falsely claims to be from an established or legitimate enterprise. The message encourages recipients to click a link that will redirect their browsers to a fraudulent Web site. Here the user is asked to update personal information such as passwords, social security numbers, and credit card numbers in an attempt to trick a recipient into providing private information that will be used for identity theft.   |
| <b>Phishing sites</b>                | A Web site that lures users into providing personal details, such as credit card information. Links to phishing sites are often sent in bogus email messages disguised as legitimate messages from well-known businesses.  |
| <b>Ping of Death</b>                 | A Denial of Service attack where a hacker directs an oversized ICMP packet at a target computer. This can cause the computers buffer to overflow, which can freeze or restart the machine.   |
| <b>Plug-ins</b>                      | Plug-ins are additional modules that enhance protection for your computer or improve the performance. There are many available plug-ins and your administrator needs to enable it before you can use it. Install new or manage installed plug-ins using the Plug-in Manager.   |
| <b>Post Office Protocol 3 (POP3)</b> | POP3 is a standard protocol for storing and transporting email messages from a server to a client email application.   |
| <b>port number</b>                   | A port number, together with a network address - such as an IP number, allow computers to communicate across a network. Each application program has a unique port number associated with it. Blocking a port on a computer prevents an application associated with that port number from sending or receiving communications to other applications on other computers across a network. Blocking the ports on a computer is an effective way to prevent malicious software from attacking that computer.  |

| <b>Term</b>                                  | <b>Description</b>   |
|--|--|
| <b>privileges (client privileges)</b>        | From the Web console, Administrators can set privileges for the Client/Server Security Agents. End users can then set the Client/Server Security Agents to scan their Clients according to the privileges you allowed. Use client privileges to enforce a uniform antivirus policy throughout your organization.   |
| <b>proxy server</b>                          | A proxy server is a computer that offers a computer network service to allow clients to make indirect network connections to other network services. A client connects to the proxy server, then requests a connection, file, or other resource available on a different server.   |
| <b>quarantine</b>                            | To place infected data such as email messages, infected attachments, infected HTTP downloads, or infected FTP files in an isolated directory (the Quarantine Directory) on your server.  |
| <b>remote</b>                                | The term "remote" refers to a computer that is connected through a network to another computer, but physically distant from that computer.   |
| <b>scan</b>                                  | To examine items in a file in sequence to find those that meet a particular criteria.  |
| <b>scan engine</b>                           | The module that performs antivirus scanning and detection in the host product to which it is integrated.   |
| <b>Secure Socket Layer (SSL)</b>             | SSL is a commonly-used protocol for managing the security of a message transmission on the Internet. SSL uses a public-and-private key encryption system, which also includes the use of a digital certificate.  |
| <b>SSL certificate</b>                       | A digital certificate that authenticates network entities such as a server or a client.  |
| <b>Web console</b>                           | The Web console is a centralized Web-based management console. You can use it to configure the settings of Client/Server Security Agents which are protecting all your remote desktops, servers and Microsoft Exchange servers. The Web console is installed when you install the Trend Micro Security Server and uses Internet technologies such as ActiveX, CGI, HTML, and HTTP. |
| <b>Security Server</b>                       | When you first install Worry-Free Business Security, you install it on a Windows server that becomes the Security Server. The Security Server communicates with the Client/Server Security Agents installed on Clients. The Security Server also hosts the Web console, the centralized Web-based management console for the entire Worry-Free Business Security solution.         |
| <b>server</b>                                | A program which provides some service to other (client) programs. The connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's responses.   |
| <b>Simple Mail Transport Protocol (SMTP)</b> | SMTP is a standard protocol used to transport email messages from server to server, and client to server, over the Internet.   |

| <b>Term</b>                                | <b>Description</b>  |
|--|---|
| <b>SOCKS</b>                               | A TCP protocol used by proxy servers to establish a connection between clients on the internal network or LAN and computers or servers outside the LAN.<br>The SOCKS 4 protocol makes connection requests, sets up proxy circuits and relays data at the Application layer of the OSI model.<br>The SOCKS 5 protocol, an extension of the SOCKS 4 protocol that offers more choices of authentication |
| <b>spam</b>                                | Unsolicited email messages meant to promote a product or service.   |
| <b>Telnet</b>                              | Telnet is a standard method of interfacing terminal devices over TCP by creating a "Network Virtual Terminal". Refer to Network Working Group RFC 854 for more information.   |
| <b>Test virus</b>                          | An inert file that acts like a real virus and is detectable by virus-scanning software. Use test files, such as the EICAR test script, to verify that your antivirus installation is scanning properly.   |
| <b>Transmission Control Protocol (TCP)</b> | A connection-oriented, end-to-end reliable protocol designed to fit into a layered hierarchy of protocols which support multi-network applications. TCP relies on IP datagrams for address resolution. Refer to DARPA Internet Program RFC 793 for information.   |
| <b>TrendLabs</b>                           | TrendLabs is Trend Micro's global network of antivirus research and product support centers that provide 24 x 7 coverage to Trend Micro customers around the world.   |
| <b>TrendSecure</b>                         | TrendSecure comprises a set of browser-based plugin tools (TrendProtect and Transaction Protector) that enable users to surf the Web securely. TrendProtect warns users about malicious and Phishing Web sites. Transaction Protector determines the safety of your wireless connection by checking the authenticity of the access point.   |
| <b>Trojan horses</b>                       | A Trojan horse is a malicious program that is disguised as legitimate software. The term is derived from the classical myth of the Trojan horse.  |
| <b>updates</b>                             | Updating describe a process of downloading the most updated components such as pattern files and scan engines to your computer.   |
| <b>virus/malware</b>                       | A virus is a program that replicates. To do so, the virus needs to attach itself to other program files and execute whenever the host program executes.   |
| <b>vulnerability</b>                       | A vulnerable computer has weaknesses in its operating system or applications. Many threats exploit these vulnerabilities to cause damage or gain unauthorized control. Therefore, vulnerabilities represent risks not only to each individual computer where they are located, but also to the other computers on your network.   |
| <b>wildcard</b>                            | A term used in reference to content filtering, where an asterisk (*) represents any characters. For example, in the expression *ber, this expression can represent barber, number, plumber, timber, and so on.  |

| <b>Term</b> | <b>Description</b>  |
|-------------|---|
| <b>worm</b> | A self-contained program (or set of programs) that is able to spread functional copies of itself or its segments to other computer systems, often through email. A worm can also be called a network virus. |

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