AUTHORIZED DOCUMENTATION

Endpoint Security Client 3.5 User Guide

Novell®

ZENworks® Endpoint Security Management

3.5

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Contents

About This Guide

This *Novell® ZENworks® Endpoint Security Client 3.5 User Guide* is written to instruct the end-user on the operation of the Endpoint Security Client 3.5 for Windows* XP* and Windows 2000*.

The information in this guide is organized as follows:

Audience

This guide can be sent to all employees in the enterprise to help them understand how to use the Endpoint Security Client 3.5.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to the Novell Documentation Feedback site (http://www.novell.com/documentation/feedback.html) and enter your comments there.

Additional Documentation

ZENworks Endpoint Security Management is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the ZENworks Endpoint Security Management 3.5 documentation Web site (http://www.novell.com/documentation/zesm35).

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In Novell documentation, a greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path.

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When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as Linux*, should use forward slashes as required by your software.

Introduction

1

Novell® ZENworks® Endpoint Security Management (ESM) is designed to protect corporate data assets, through a centrally managed tool called the Endpoint Security Client. The Endpoint Security Client 3.5 is installed on Windows XP and Windows 2000 enterprise computers and enforces security policies written and sent down through the ESM management and distribution system. This allows large enterprises and small businesses to create, deploy, enforce, and monitor computer security policies on computers inside and outside of the corporate security perimeter.

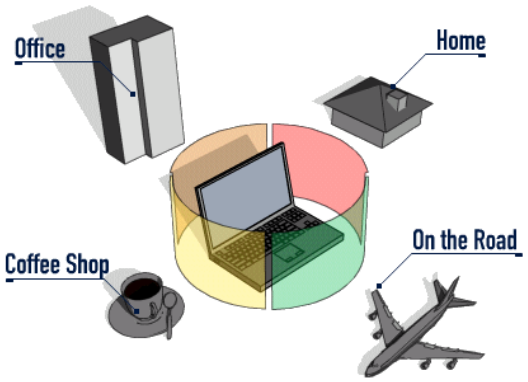
For Windows Vista computers, see *ZENworks Endpoint Security Client 4.0 User Guide*.

The following sections contain additional information:

1.1 Security Enforcement for Mobile Computers

Security is enforced both globally and by network location. Each location listed in a security policy determines the user's permissions in that network environment and determines which firewall settings are activated. The firewall settings determine which networking ports, network addresses, and applications are granted network access and how that access is permitted.

Figure 1-1 *ESM Adjusts Security Settings Based on the Detected Network Environment*



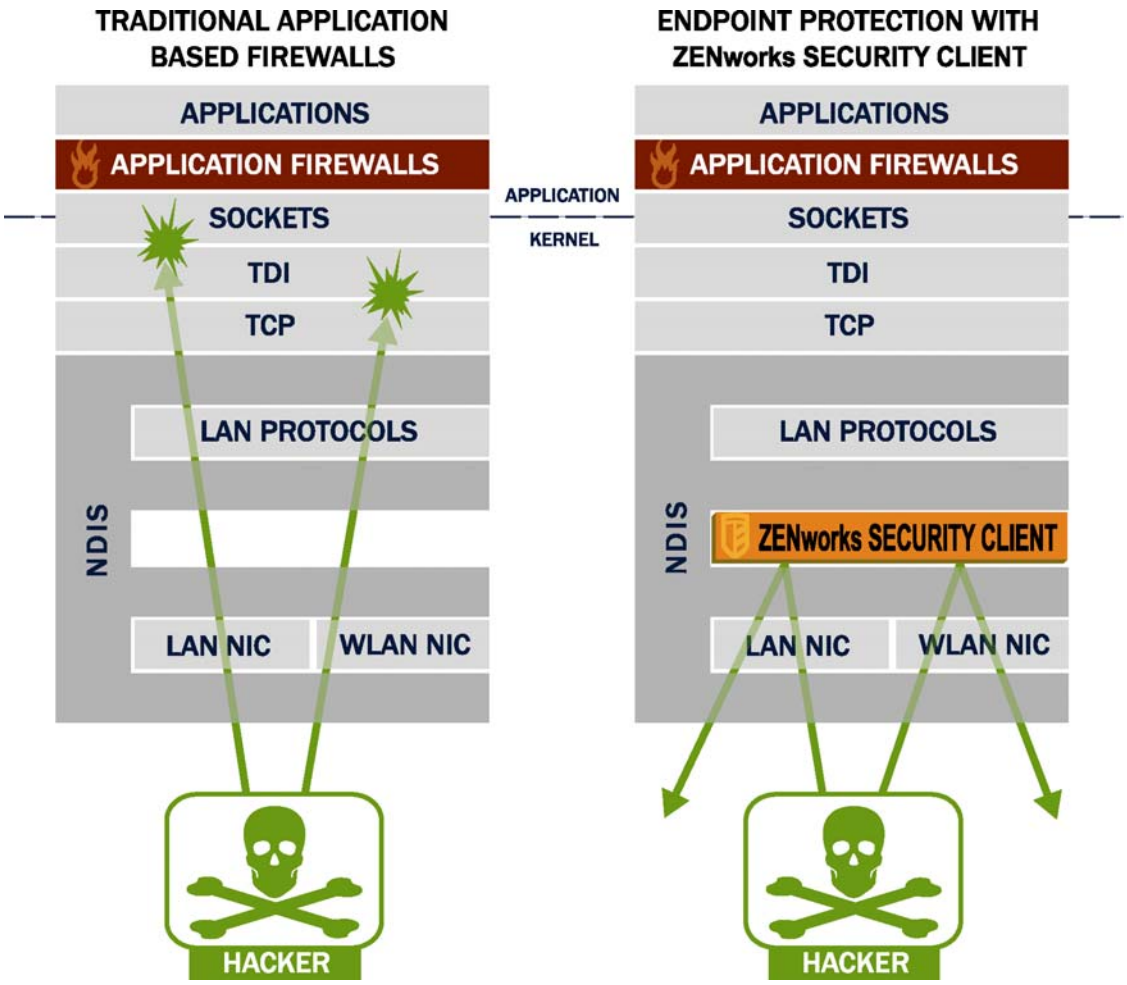
Normal operations of the Endpoint Security Client 3.5 are transparent to the user, after the network environments have been defined. Occasionally, Endpoint Security Client 3.5 protective measures can interrupt normal operation; when this occurs, messages and hyperlinks display to notify the user about the security policy, what protective steps have been taken, and refer them to additional information to help correct the issue.

1.2 NDIS Layer Firewall Protection

In securing mobile devices, ESM is superior to typical personal firewall technologies that operate only in the application layer or as a firewall-hook driver. ESM client security is integrated into the Network Driver Interface Specification (NDIS) driver for each network interface card (NIC),

providing security protection from the moment traffic enters the computer. Differences between ESM and application-layer firewalls and filter drivers are illustrated in Figure 1-2, “Effectiveness of an NDIS-Layer Firewall,” on page 10.

Figure 1-2 *Effectiveness of an NDIS-Layer Firewall*



Security decisions and system performance are optimized when security implementations operate at the lowest appropriate layer of the protocol stack. With the Endpoint Security Client 3.5, unsolicited traffic is dropped at the lowest levels of the NDIS driver stack by means of Adaptive Port Blocking (stateful packet inspection) technology. This approach protects against protocol-based attacks, including unauthorized port scans, SYN Flood attacks, and others.

It is recommended that you follow all operation and maintenance recommendations in this document, in order to ensure that the endpoint security environment is protected.

Endpoint Security Client 3.5 Overview

2

The ZENworks® Security Client secures computers from data invasion attacks at home, at work, and while traveling, through the enforcement of security policies created by the enterprise Endpoint Security Management (ESM) administrator. The firewall settings assigned at individual locations are automatically adjusted when laptop users move from the corporate network to their home networks or go on the road and log on to a public or open network.

Security levels are applied to various user locations without requiring user expertise or understanding of network security, port configurations, hidden shared files, or other technical details. Immediate information on which location and firewall setting the Endpoint Security Client 3.5 is in and which adapters are presently active or permitted is available by simply mousing over the taskbar icon to view the Endpoint Security Client ToolTip (see Figure 2-1).

Figure 2-1 *Endpoint Security Client ToolTip*

The following sections contain additional information:

- Section 2.1, “ESM Terminology,” on page 11
- Section 2.2, “Logging In to the Endpoint Security Client 3.5,” on page 12

2.1 ESM Terminology

The following terms are frequently used in this documentation:

Locations: Locations are simple definitions that help users identify the network environment they are in, provide immediate security settings (defined by the administrator), and permit the user to save the network environment and change the applied firewall settings.

Each location is given unique security settings, denying access to certain network functionality and hardware in more hostile network environments, and permitting broader access within trusted environments. Locations define the following information:

- How often the Endpoint Security Client 3.5 checks for a policy update in this location
- The location management permissions granted to a user
- The firewall settings that are used at this location
- The communication hardware that is permitted to connect
- How Wi-Fi connectivity and security is handled at this location

- At what level the user is permitted to use removable storage devices (such as thumb drives and memory cards) and to use CD/DVD-RW drives
- Any network environments that can help to define the location

Firewall Settings: Firewall settings control the connectivity of all networking ports (1-65535), network packets (ICMP, ARP, etc.), network addresses (IP or MAC), and which network applications (file sharing, instant messenger software, etc.) are permitted to get a network connection when the setting is applied. Three firewall settings are included as defaults for ESM, and can be implemented at a location. The ESM Administrator can also create specific firewall settings, which cannot be listed here.

- **All Adaptive:** This firewall setting sets all networking ports as stateful (all unsolicited inbound network traffic is blocked; all outbound network traffic is allowed). ARP and 802.1x packets are permitted, and all network applications are permitted a network connection.
- **All Open:** This firewall setting sets all networking ports as open (all network traffic is allowed). All packet types are permitted. All network applications are permitted a network connection.
- **All Closed:** This firewall setting closes all networking ports, and restricts all packet types.

Adapters: Refers to three communication adapters normally found on an endpoint:

- Wired Adapters (LAN connections)
- Wi-Fi Adapters (PCMCIA Wi-Fi cards, and built-in Wi-Fi radios)
- Dial-up Adapters (both internal and external modems)

Also refers to other communication hardware that might be included on a computer, such as infrared, Bluetooth*, FireWire*, and serial and parallel ports.

Storage Devices: Refers to external storage devices that can pose a security threat when data is copied to, or introduced from, these devices on an endpoint. USB thumb drives, flash memory cards, and SCSI PCMCIA memory cards, along with traditional Zip*, floppy, and external CDR drives and the installed CD/DVD drives (including CD-ROM, CD-R/RW, DVD, DVD R/RW), can all be blocked, permitted, or rendered to Read-Only at a single location.

Network Environments: A network environment is the collection of network services and service addresses required to identify a network location (see Section 3.2.1, “Saving a Network Environment,” on page 16).

2.2 Logging In to the Endpoint Security Client 3.5

If you are a member of the corporate domain, the Endpoint Security Client 3.5 uses your Windows* username and password to log you in to the Policy Distribution Service (no pop-up window displays). If you are not a member of the domain that the Policy Distribution Service is hosted on, the Endpoint Security Client 3.5 prompts you for your username and password for that domain (see Figure 2-2).

Figure 2-2 *Endpoint Security Client 3.5 Login*

Enter your username and password for the domain, then click *OK*.

NOTE: It is not necessary to log in to the Endpoint Security Client 3.5 when the Endpoint Security Client is running as Unmanaged. The ESM Administrator has a different method to deliver policies to unmanaged users.

Using the Endpoint Security Client 3.5

3

The following sections contain additional information about actions that you can perform using the Novell® ZENworks® Endpoint Security end-user application, the Endpoint Security Client 3.5:

NOTE: The actions listed above can be restricted by the administrator at any location.

3.1 Moving Among Network Environments

Each network an end user travels to might require different security measures. The Endpoint Security Client 3.5 provides security and protection in locations identified by available network connections. The Endpoint Security Client 3.5 detects the network environment parameters and switches to the appropriate location, applying the needed protection levels according to the current security policy.

Network environment information is either stored or preset within a location. This allows the Endpoint Security Client 3.5 to switch to a location automatically when the environment parameters are detected.

- **Stored Environments:** Defined by the user (see Section 3.2.1, “Saving a Network Environment,” on page 16).
- **Preset Environment:** Defined by the enterprise ESM Administrator through a published security policy.

When the user enters a new network environment, the client compares the detected network environment to any stored and preset values in the security policy. If a match is found, the Endpoint Security Client 3.5 activates the assigned location. When the detected environment cannot be identified as a stored or preset environment, the client activates the default Unknown location.

The Unknown location has the following presets:

- Change Locations = Permitted
- Change Firewall Settings = Not permitted
- Save Location = Not permitted

- Update Policy = Permitted
- Default Firewall settings = All Adaptive

The three adapter types, Wi-Fi, Wired, and Dialup are permitted in the Unknown location. This allows the computer to interface peripherally with its network environment, and attempt to associate a location policy as described above.

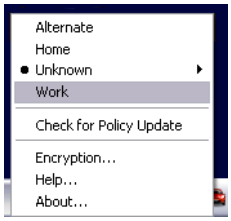
3.2 Changing Locations

At startup, the Endpoint Security Client 3.5 switches to the Unknown location. It then attempts to detect the current network environment and to change the location automatically. If the network environment is either unrecognized, or has not been preset or saved (see Section 3.2.1, "Saving a Network Environment," on page 16), the location must be changed manually.

If you cannot perform the following steps, your ZENworks Endpoint Security administrator might have prevented you from changing locations manually.

To change a location:

1. Right-click the *Endpoint Security Client* icon in the taskbar to display a menu of choices.



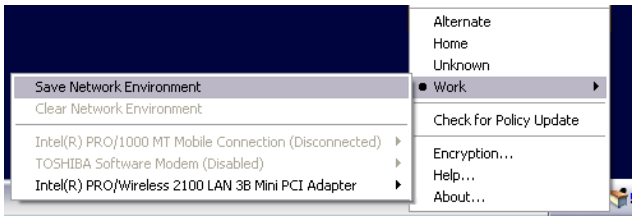
2. Click the appropriate location.

3.2.1 Saving a Network Environment

A network environment needs to either be preset in the security policy or saved by the end user before the Endpoint Security Client 3.5 can automatically change locations. Saving a network environment saves the network parameters for the current location, and allows the Endpoint Security Client 3.5 to automatically switch to that location the next time the user enters the network environment. When applied in a Wi-Fi network environment, the Endpoint Security Client 3.5 will LockOn™ to the single selected access point.

To save an environment:

1. Right-click the *Endpoint Security Client* icon in the taskbar to display the menu.
2. Click the location you want to change to.
3. Right-click the *Endpoint Security Client* icon, mouse over the current location to display the submenu, then click Save Network Environment to save the environment.



If this network environment was saved at a previous location, the Endpoint Security Client 3.5 asks if the user wants to save the new location. Select *Yes* to save the environment to the current location and clear the environment from its prior location, or select *No* to leave the environment in the prior location.

NOTE: The *Save Network Environment* function can be restricted by the ESM Administrator at any location.

Additional network environments can be further saved to a location. For example, if a location defined as Airport is part of the current policy, each airport visited by the mobile user can be saved as a network environment for this location. This way, every time a mobile user returns to a saved airport environment, the Endpoint Security Client 3.5 automatically switches to the Airport location.

3.2.2 Saving a Wi-Fi Environment

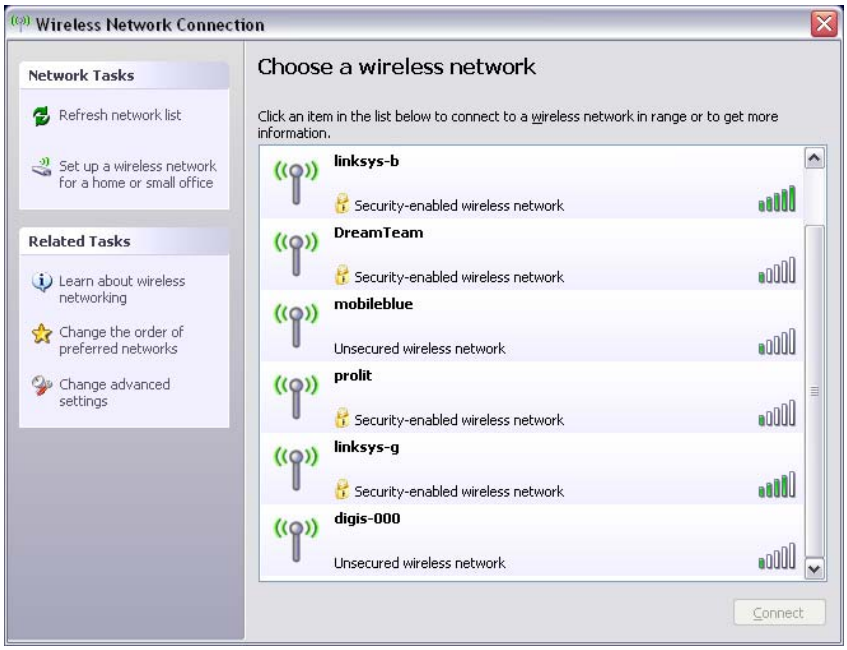
When users activate their Wi-Fi adapters, they might see dozens of available access points. A Wi-Fi adapter might lock on to a single access point at first, but if too many access points are within proximity of the adapter, the associated access point might be dropped and the wireless connection manager could prompt the adapter to switch to the access point with the strongest signal. When this occurs, current network activity is halted, often forcing a user to resend certain packets and reconnect the VPN to the corporate network.

If an access point is saved as a network environment parameter at a location, the adapter locks on to that access point and does not lose connectivity until the user physically moves away from the access point. Upon returning to the access point, the adapter automatically associates with the access point, the location changes, and all other access points are no longer visible through wireless connection management software.

To save a Wi-Fi Environment:

1 Open the connection management software and select the desired access point.

NOTE: Connection management software can be overridden by location when the ESM security policy is set to manage your wireless connectivity.



2 Specify any necessary security information (WEP or other security key), then click *Connect*.

3 Complete the steps outlined in Section 3.2.1, "Saving a Network Environment," on page 16 to save this environment.

3.2.3 Removing a Saved Environment

To remove a saved network environment from a location:

1 Right-click the *Endpoint Security Client* icon in the taskbar to display the menu.

2 Change to the appropriate location.

3 Right-click the *Endpoint Security Client* icon, then select the current location to display the submenu.

4 Click *Clear Network Environment* to clear the environment.

NOTE: This clears all saved network environments for this location.

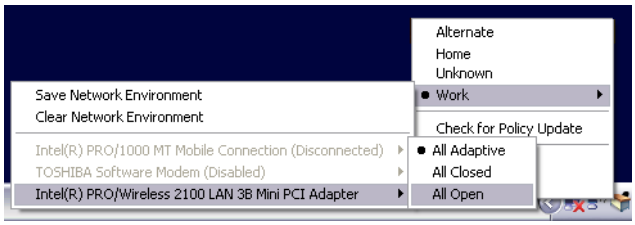
3.3 Changing Firewall Settings

Each location can be assigned more than one firewall setting. Changing the firewall setting can open or close networking ports and allow or disallow certain types of networking in a given location.

To change the firewall settings:

1 Right-click the *Endpoint Security Client* icon in the taskbar to display the menu.

2 Mouse over the current location to display the submenu, then click the selection to change the firewall setting.



NOTE: The number of firewall settings available in a location is determined by policy.

3.4 Data Encryption

When activated by policy, the Endpoint Security Client 3.5 manages the encryption of files placed in a specific directory on the endpoint and placed in removable storage devices.

The following instructions will assist you in using ZENworks Endpoint Security on the endpoint.

- Section 3.4.1, "Managing Files on Fixed Disks," on page 19
- Section 3.4.2, "Managing Files on Removable Storage," on page 19

3.4.1 Managing Files on Fixed Disks

Fixed disks are defined as all hard-disk drives installed on the computer, as well as any partitions of a hard-disk drive. Each fixed disk on the endpoint has an `Encrypted Files` folder placed at the root directory. All files placed in this folder are encrypted, using the current encryption key. Only authorized users on the computer can decrypt these files.

When saving a file, select the `Encrypted Files` folder from the available folders on the desired drive.

3.4.2 Managing Files on Removable Storage

Removable storage is defined as any storage device that is "connected" to a computer. This includes (but is not limited to) USB thumb drives, flash memory cards, and PCMCIA memory cards, along with traditional Zip, floppy, and external CDR drives, digital cameras with storage capacity, and MP3 players.

When you are running ZENworks Endpoint Security, files stored on these devices are encrypted as they are accessed by the operating system or the user. Files copied to the device are immediately encrypted. When the removable storage device is connected to a computer not managed by the ZENworks Endpoint Security system, the files remain encrypted and cannot be decrypted.

Encryption of removable storage occurs at the insertion of the device (see "What If I Don't Want the Device Encrypted?" on page 20). However, files added to an encrypted removable storage device on another machine are not encrypted, and must be encrypted manually.

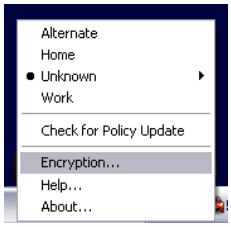
The following sections contain more information:

- "Encrypting Files" on page 20

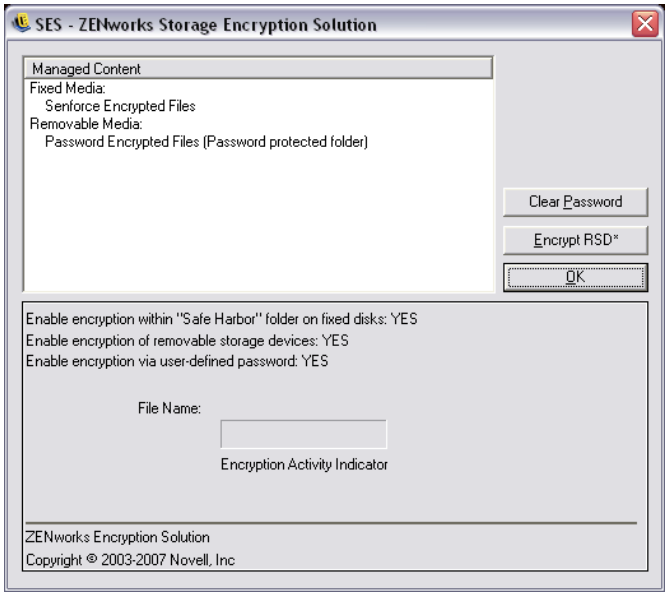
Encrypting Files

To encrypt added files on a removable storage device:

1. Plug the storage device into the appropriate port on your computer.
2. Right-click the *Endpoint Security Client* icon in the taskbar.
3. Select *Encryption* from the menu.



4. Click *Encrypt RSD*. This encrypts all files on the removable storage device with the current encryption key.



The amount of time needed to encrypt the files depends upon the amount of data stored on the device.

What If I Don’t Want the Device Encrypted?

When you insert a removable storage device, the Endpoint Security Client prompts, asking if you want the drive encrypted, or if you prefer to remove it and not encrypt all files.

Figure 3-1 *Encryption Warning when a New Device is Inserted*

To prevent encryption, remove the drive before clicking *Continue*. Click *Continue* to either encrypt the drive or to close the window after removing the device.

Password Encrypting Files

Your administrator can enable the Security client to create a Password Encrypted Files folder on any removable device that connects to your computer. This folder is named by your administrator; therefore, it might be named Password Encrypted Files or some other name.

When you add files to this folder, they are encrypted with a password that you supply. You can then access the files from any device that is not running the Security client. To decrypt the files, you need the ZENworks File Decryption utility and the encryption password. You must get the utility from your administrator.

For example, assume that you are working on encrypted files at work. You want to take the files home to work on them, but your home computer does not have the Security client installed. You copy the files to the Password Encrypted Files folder on your USB thumb drive, take the files home, then access them using the ZENworks File Decryption utility you got from your administrator.

To use the Password Encrypted Files folder:

1. Move or save a file to the folder.
2. At the password prompt, enter a password and confirmation password.
3. Enter a hint for the password.

The Security client remembers the password and applies it to any new files that you add to the folder until you reboot your computer. Any time your computer reboots, the first time you add a file to the folder you are again prompted to supply a password.

Changing the Password to Files in the Password Encrypted Files Folder

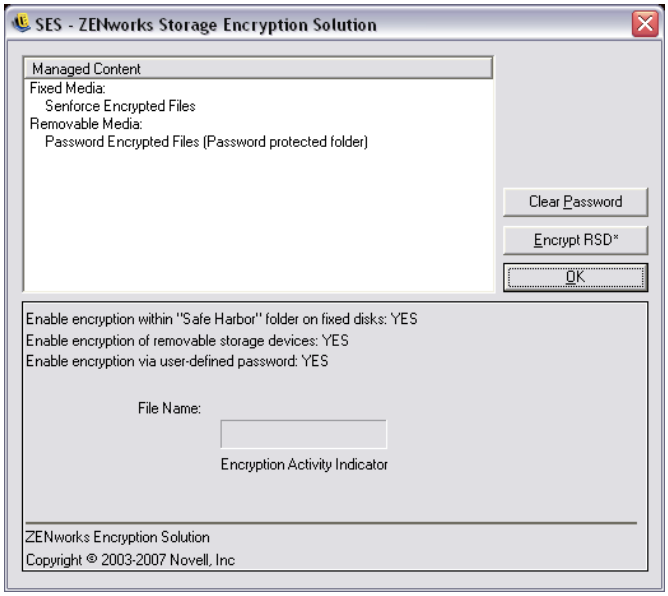
You can use the Encryption control to change passwords for files added to the Password Encrypted Files folder. This does not change any existing passwords, just the password for future files.

To change the password:

1. Plug the storage device into the appropriate port on your computer.
2. Right-click the *Endpoint Security Client* icon in the taskbar.

3 Select *Encryption* from the menu.

4 Click *Clear Password*.



5 Drag a file to the Password Encrypted Files folder and enter the new password and hint.

All new files added to the folder now require the new password for access.

Using the File Decryption Utility

To use the File Decryption utility:

1 Plug the storage device into the appropriate port on your computer.

2 Open the File Decryption Utility (`stdecrypt.exe`).

3 Click the *Advanced* button.

4 In the Source panel, select *Password Protected Only*.

5 In the Source panel, click *Browse*, navigate to the storage device's Password Encrypted Files directory, select the desired file, then click *Save*.

or

To decrypt the entire Password Encrypted Files directory rather than a single file, select *Directories*, then browse to and select the appropriate directory.

6 In the Destination panel, click *Browse* to select the folder on the local machine where the decrypted files will be stored.

7 Click *Decrypt*.

8 Enter the password to decrypt the file.

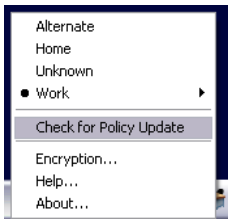
If you selected the entire directory, not all files may have the same password. You are prompted each time the utility attempts to open a file that has a different password.

The transaction can be monitored by clicking the *Show Progress* button.

3.5 Updating Policies

New security policies are released to managed users as they are published. The Endpoint Security Client automatically receives updates at intervals determined by the ESM administrator. However, the managed user can check for policy updates when entering a new location.

1. Right-click the *Endpoint Security Client* icon in the taskbar to display the menu.
2. Click *Check for Policy Update*.



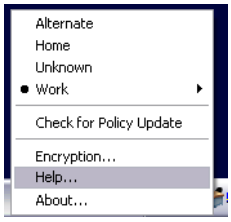
NOTE: Automatic updates and checking for policy updates are not available features when the Endpoint Security Client 3.5 is running as Unmanaged. The ESM Administrator has a different method to deliver policy updates to these users.

The Endpoint Security Client 3.5 notifies you if the policy has been updated.

NOTE: Switching wireless access cards out occasionally displays the `Policy Has Been Updated` message. The Policy has not been updated, the Endpoint Security Client 3.5 is simply comparing the device to any restrictions in the current policy.

3.6 Viewing Help

1. Right-click the *Endpoint Security Client* icon in the taskbar to display the menu.
2. Click *Help*.



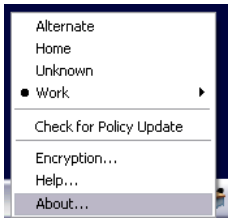
3.7 Overriding a Password

Productivity interruptions that a user might experience because of restrictions to connectivity, software, or thumb drives are probably caused by the security policy the Endpoint Security Client 3.5 is enforcing. Changing locations or firewall settings usually lifts these restrictions and restores the interrupted functionality. However, in some cases the restriction could be implemented in such a way that it affects all locations and firewall settings. When this is the case, the restrictions must be temporarily lifted to allow productivity.

The Endpoint Security Client 3.5 is equipped with a Password Override feature that temporarily disables the current security policy to permit the necessary activity. The Security Administrator distributes a single-use password key only when needed, and should be informed of any problems with a security policy. After the password key's time limit has expired, the security policy protecting the endpoint is restored. Rebooting the endpoint also restores the security settings.

To activate the password override:

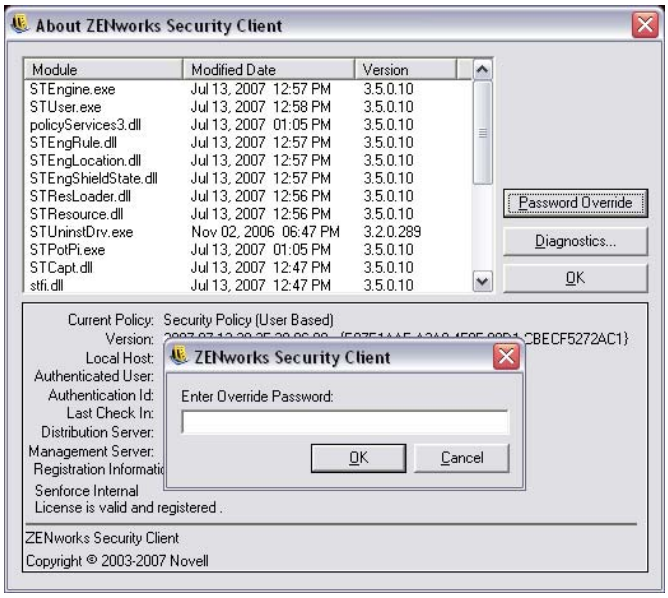
1. Contact your company's ESM Administrator to get the password key
2. Right-click the *Endpoint Security Client* icon in the taskbar to display the menu, then click *About*.



3. Click *Password Override* to display the password window.

NOTE: If the *Password Override* button is not displayed on this screen, your current policy does not have a password override.

Figure 3-2 *Password Window*



4. Type the password key provided by your ZENworks Endpoint Security administrator.
5. Click *OK*. The current policy will be replaced with a default, All Open policy for the designated time.

Clicking *Load Policy* (which replaces the *Password Override* button) in the *About* window restores the previous policy. If your administrator has updated your policy to resolve existing issues, you should instead use *Check for Policy Update* to download the new policy immediately.

3.8 Diagnostics

Novell provides diagnostics tools to allow the administrator to troubleshoot Endpoint Security Client 3.5 issues. Your ZENworks Endpoint Security administrator will guide you through the diagnostics process.