AUTHORIZED DOCUMENTATION

Endpoint Security Client 4.0 User Guide

Novell®
ZENworks® Endpoint Security Management

4.0

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www.novell.com

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About This Guide

This *Novell® ZENworks® Endpoint Security Client 4.0 User Guide* is written to instruct the end-user on the operation of the Endpoint Security Client 4.0 for Microsoft Windows* Vista*.

The information in this guide is organized as follows:

- Chapter 1, "Introduction," on page 9
- Chapter 2, "Endpoint Security Client 4.0 Overview," on page 11
- Chapter 3, "Using the Endpoint Security Client 4.0," on page 15

Audience

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

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).

Documentation Conventions

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

A trademark symbol (®, ™, etc.) denotes a Novell trademark. An asterisk (*) denotes a third-party trademark.

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.

Contents

Introduction

1

The Novell® ZENworks® Endpoint Security Client 4.0 is a client release to support Microsoft Windows Vista with Support Pack 1 running in 32-bit mode. The Endpoint Security Client 4.0 uses the ZENworks Endpoint Security Management 3.5 Server and Management Console.

Novell ZENworks Endpoint Security Management (ESM) is designed to protect corporate data assets, through a centrally managed tool called the ZENworks Security Client. The ZENworks Endpoint Security Client 4.0 is installed on Windows Vista 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.

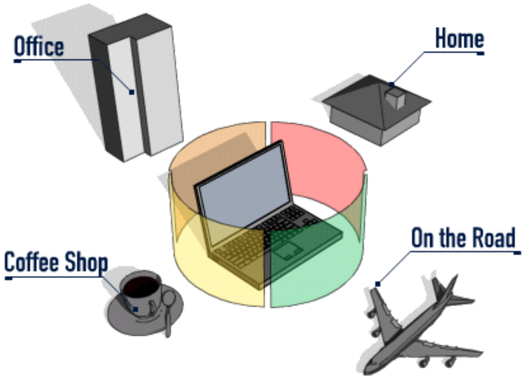
The following sections contain additional information:

- Section 1.1, “Security Enforcement for Mobile Computers,” on page 9
- Section 1.2, “NDIS Layer Firewall Protection,” on page 10

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*

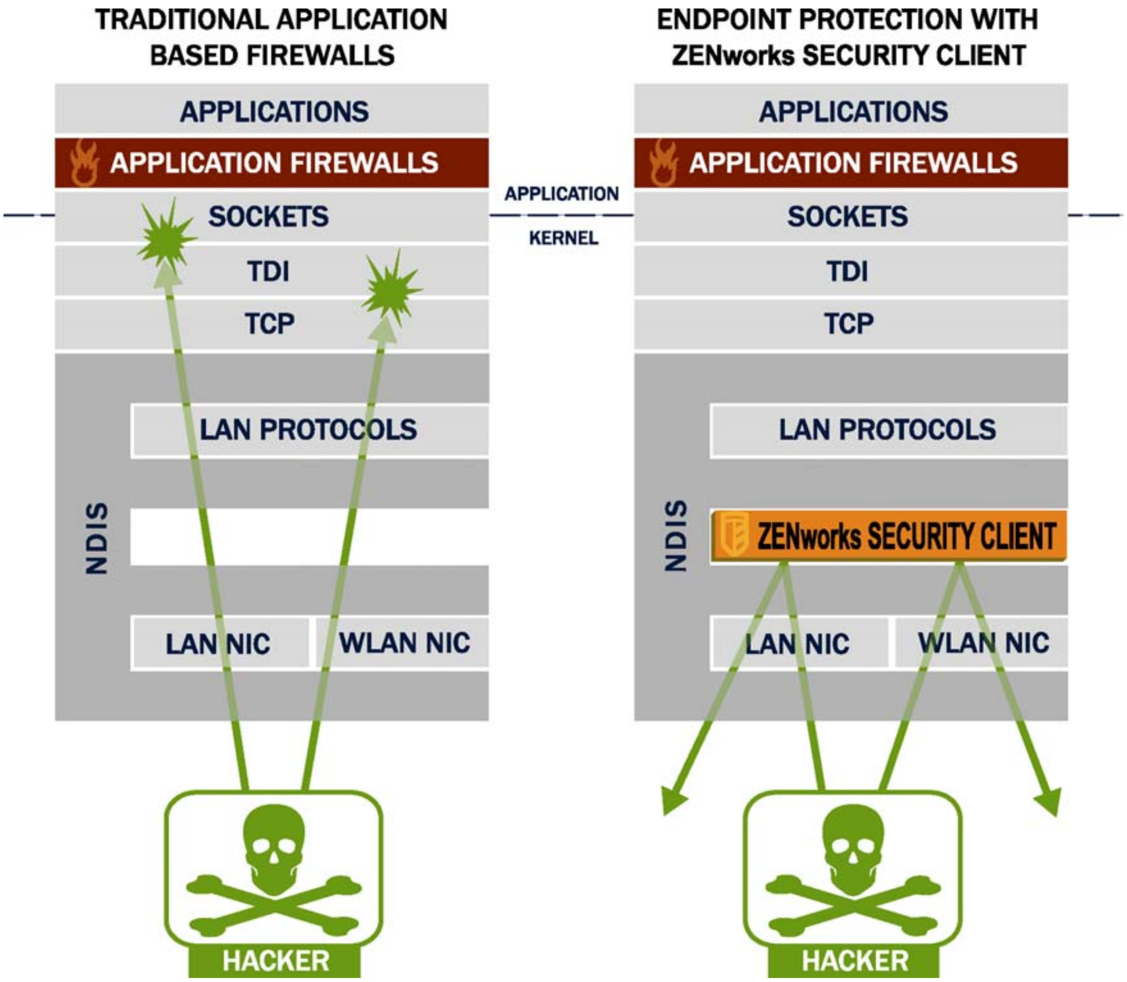


Normal operations of the Endpoint Security Client 4.0 are transparent to the user, after the network environments have been defined. Occasionally, Endpoint Security Client 4.0 protective measures can interrupt normal operation; when this occurs, messages and hyperlinks display to notify the user about 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 4.0 , 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.

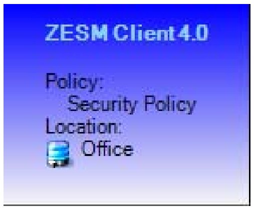
Endpoint Security Client 4.0 Overview

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 locations and policies are 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*



ZESM Client 4.0

Policy:
Security Policy
Location:
Office

The following sections contain additional information:

- Section 2.1, “ESM Terminology,” on page 11
- Section 2.2, “Logging In to the Endpoint Security Client 4.0,” 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 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
- 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)

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.

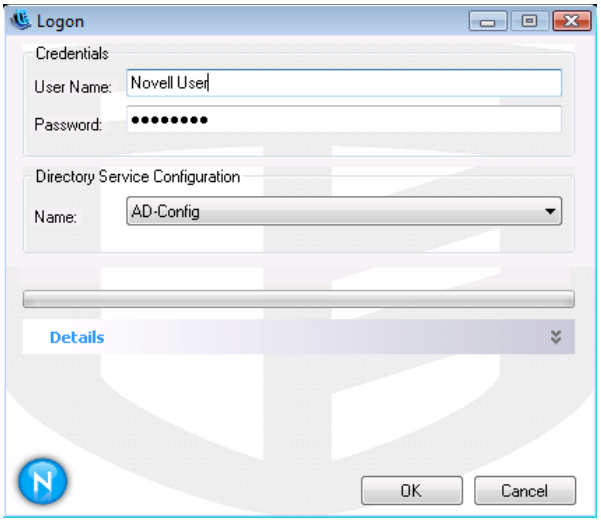
2.2 Logging In to the Endpoint Security Client 4.0

If you are a member of the corporate Active Directory domain, the Endpoint Security Client 4.0 uses your Windows* username and password to log you in to the Policy Distribution Service (no pop-up window displays). If you are member of a Novell eDirectory tree, the Endpoint Security Client 4.0 prompts you for your username and password for the tree (see Figure 2-2).

NOTE: With Novell eDirectory, the user receives a pop-up login window once after the Endpoint Security Client 4.0 installs. This allows you to provide your username and password for the tree.

If you are not a member of the domain that the Policy Distribution Service is hosted on, the Endpoint Security Client 4.0 prompts you for your username and password for that domain (see Figure 2-2).

Figure 2-2 Endpoint Security Client 4.0 Login



Credentials

User Name: Novell User

Password: ••••••••

Directory Service Configuration

Name: AD-Config

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

The Directory Service Configuration Name needs to match the directory services you are authenticating to. Use the drop-down menu to see if you have more than one service available.

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

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3 Using the Endpoint Security Client 4.0

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 4.0:

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 4.0 provides security and protection in locations identified by available network connections. The Endpoint Security Client 4.0 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 4.0 to switch to a location automatically when the environment parameters are detected.

- **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 4.0 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
- Update Policy = Permitted
- Default Firewall settings = All Open

By default, all adapter types (wired, Wi-Fi, and modem) 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.

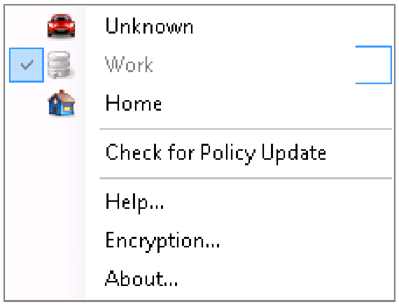
3.2 Changing Locations

At startup, the Endpoint Security Client 4.0 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, 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 4.0* icon in the taskbar to display a menu of choices.



2 Click the appropriate location.

3.3 Data Encryption

When activated by policy, the Endpoint Security Client 4.0 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 3.3.1, “Managing Files on Non-System Volumes,” on page 16
- Section 3.3.2, “Managing Files on Removable Storage,” on page 16

3.3.1 Managing Files on Non-System Volumes

Fixed disks are defined as all non-system volume drives installed on the computer, as well as any partitions of a hard-disk drive. Each fixed disk on the endpoint has a “Safe Harbor” folder (by default the folder is called `Encrypted Files`) and exists on each non-system volume or drive off 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 Safe Harbor folder from the available folders on the desired drive.

3.3.2 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 18). However, files added to an encrypted removable storage device on another machine are not encrypted, and must be encrypted manually.

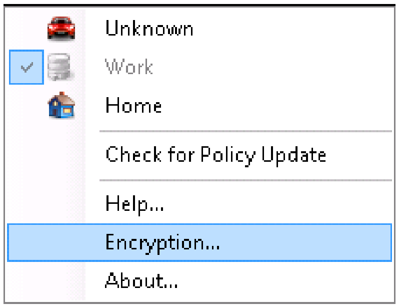
The following sections contain more information:

- "Encrypting Files" on page 17
- "What If I Don't Want the Device Encrypted?" on page 18
- "Password Encrypting Files" on page 19
- "Changing the Password to Files in the Shared Files Folder" on page 19
- "Using the File Decryption Utility" on page 20

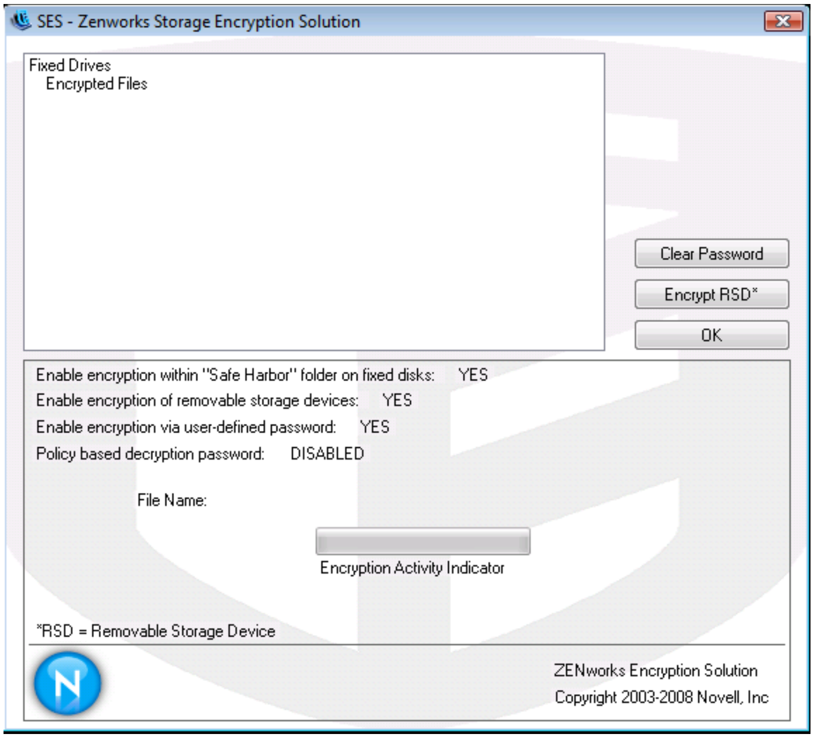
Encrypting Files

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.


SES - Zenworks Storage Encryption Solution
Fixed Drives
Encrypted Files
Clear Password
Encrypt RSD*
OK
File Name:
Encryption Activity Indicator
ZENworks Encryption Solution
Copyright 2003-2008 Novell, Inc

Enable encryption within "Safe Harbor" folder on fixed disks: YES
Enable encryption of removable storage devices: YES
Enable encryption via user-defined password: YES
Policy based decryption password: DISABLED

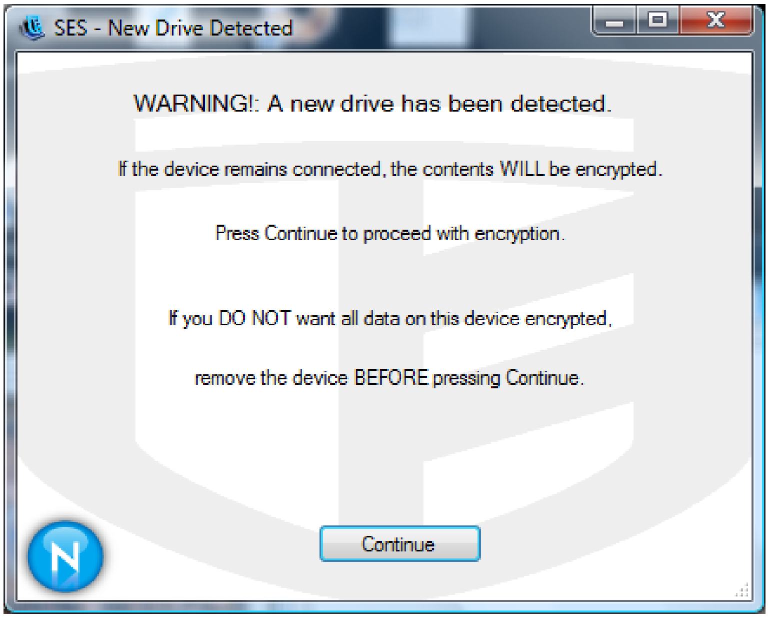
*RSD = Removable Storage Device

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*



WARNING!: A new drive has been detected.

If the device remains connected, the contents WILL be encrypted.

Press Continue to proceed with encryption.

If you DO NOT want all data on this device encrypted,

remove the device BEFORE pressing Continue.

WARNING: 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.

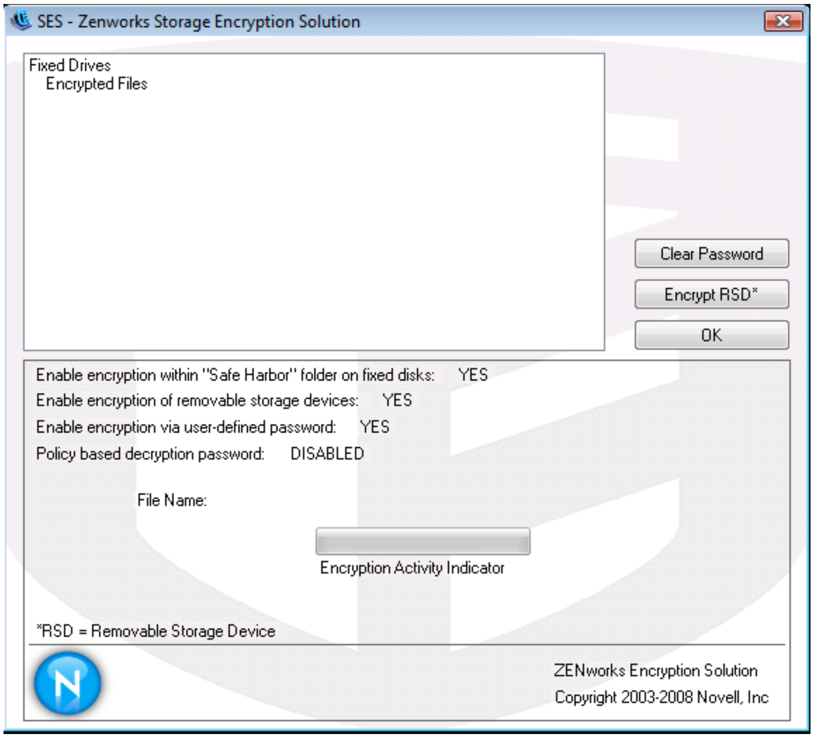
The Security client remembers the password and applies it to any new files that you add to the folder until you reboot your computer. Any time your computer reboots, the first time you add a file to the folder you are again prompted to supply a password.

Changing the Password to Files in the Shared 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*.


SES - Zenworks Storage Encryption Solution
Fixed Drives
Encrypted Files
Clear Password
Encrypt RSD*
OK
File Name:
Encryption Activity Indicator
ZENworks Encryption Solution
Copyright 2003-2008 Novell, Inc

Enable encryption within "Safe Harbor" folder on fixed disks: YES
Enable encryption of removable storage devices: YES
Enable encryption via user-defined password: YES
Policy based decryption password: DISABLED

*RSD = Removable Storage Device

5 Drag a file to the `Shared 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.

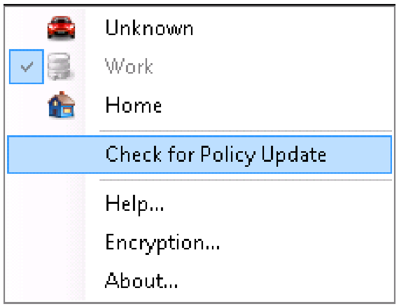
If you selected the entire directory, not all files may have the same password. You are prompted each time the utility attempts to open a file that has a different password.

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

3.4 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 anytime if the policy allows it.

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

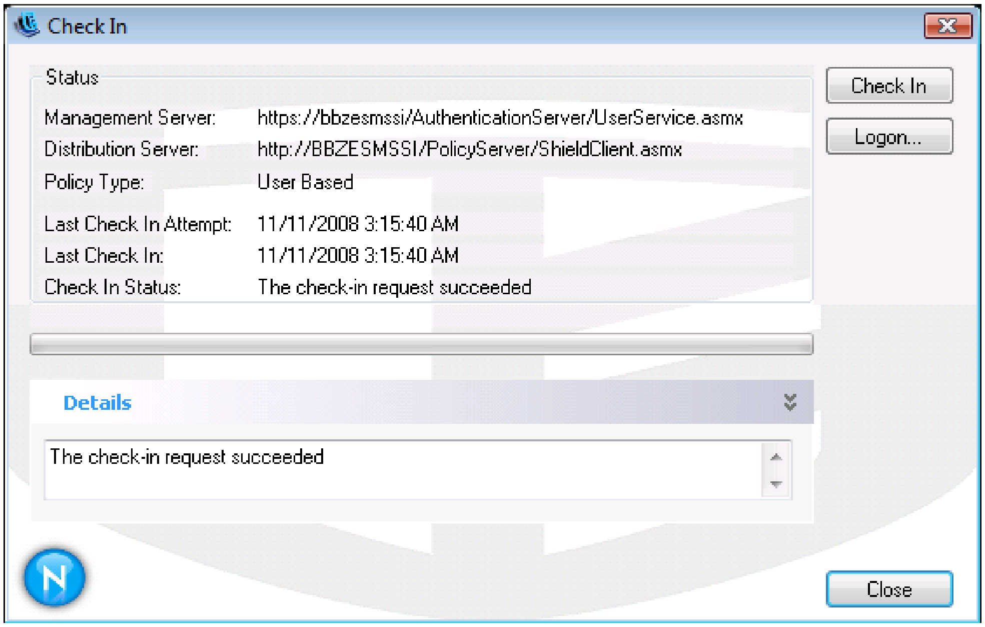


NOTE: Automatic updates and checking for policy updates are not available features when the Endpoint Security Client is running as standalone. The ESM Administrator has a different method to deliver policy updates to these users.

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

You can also manually check in if your ZENworks Endpoint Security administrator allows you this feature.

1. Right-click the *Endpoint Security Client* icon in the taskbar to display the menu, then click *About*, or double-click the *Endpoint Security Client* icon.
2. Click *Check In*.



Management Server: https://bbzesmssi/AuthenticationServer/UserService.asmx
Distribution Server: http://BBZESMSSI/PolicyServer/ShieldClient.asmx
Policy Type: User Based
Last Check In Attempt: 11/11/2008 3:15:40 AM
Last Check In: 11/11/2008 3:15:40 AM
Check In Status: The check-in request succeeded

The check-in request succeeded

If you do not have rights to perform a check in, the *Check In* button is greyed out.

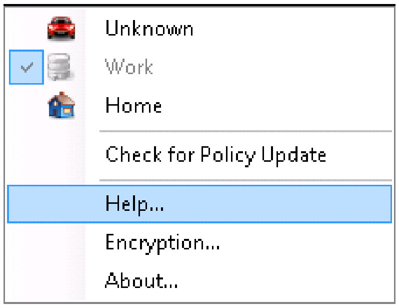
The Check In window displays the current state of the check in process. It shows the management and distribution servers if this is a managed client, the policy type, the last time a check in was attempted and the last time it succeeded, and the check in status.

3. To perform a manual check in, click the *Manual Check In* button. The information in the Check In window updates accordingly.

   The *Logon* button lets you log into the Policy Distribution Service. For details, see Section 2.2, “Logging In to the Endpoint Security Client 4.0,” on page 12.

3.5 Viewing Help

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



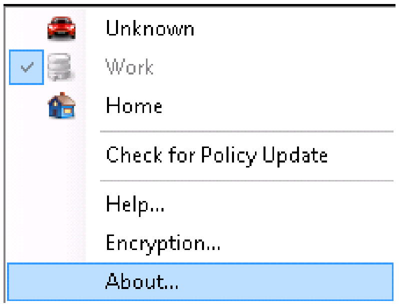
3.6 Overriding a Password

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 4.0 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 4.0 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 (set by the administrator), the security policy protecting the endpoint is restored. Rebooting the endpoint also restores the security settings.

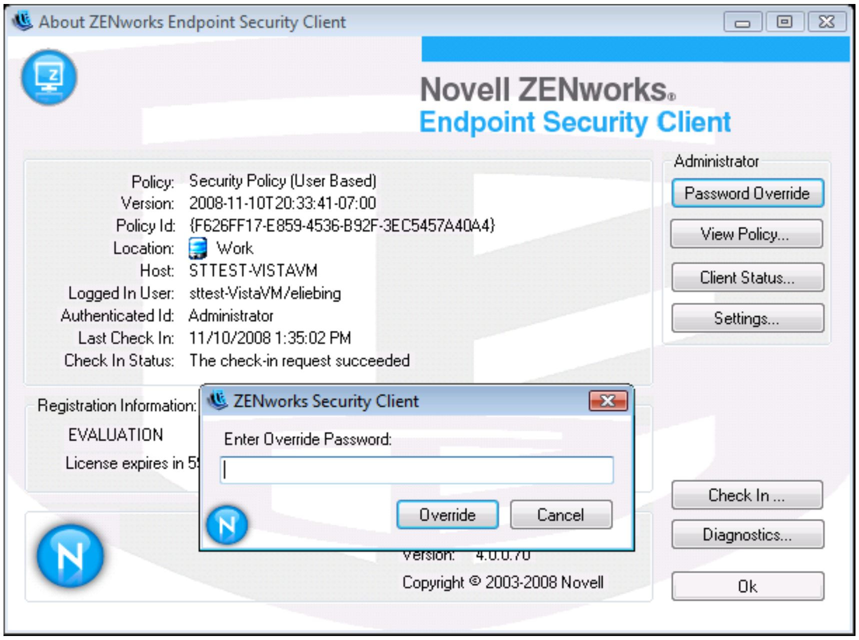
To activate the password override:

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*, or double-click the *Endpoint Security Client* icon.



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.



Policy: Security Policy (User Based)
Version: 2008-11-10T20:33:41-07:00
Policy Id: {F626FF17-E859-4536-B92F-3EC5457A40A4}
Location: Work
Host: STTEST-VISTAVM
Logged In User: sttest-VistaVM/eliebing
Authenticated Id: Administrator
Last Check In: 11/10/2008 1:35:02 PM
Check In Status: The check-in request succeeded

Registration Information:
EVALUATION
License expires in 5

ZENworks Security Client
Enter Override Password:

Version: 4.0.0.70
Copyright © 2003-2008 Novell

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.

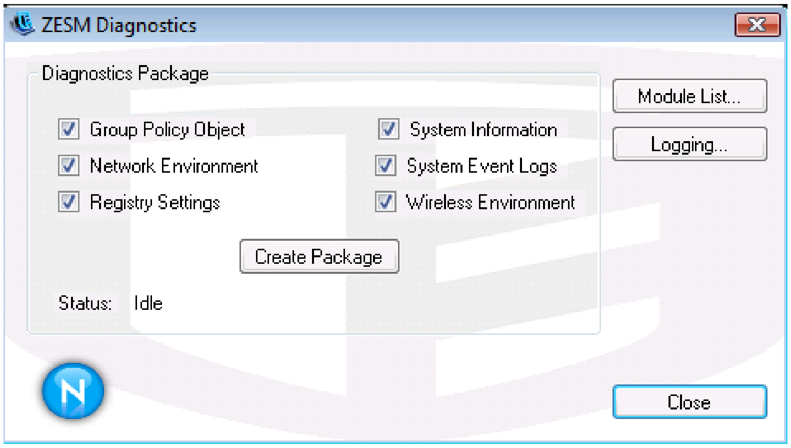
WARNING: Encryption services are never overridden.

3.7 Diagnostics

Novell provides diagnostics tools to allow the administrator to troubleshoot Endpoint Security Client issues. Your ZENworks Endpoint Security administrator will guide you through the diagnostics process. Contact Novell Support for further questions.

You might be asked for a diagnostics package. Your ZENworks Endpoint Security administrator will tell you what to include in it. To create a diagnostics package:

1. Right-click the *Endpoint Security Client* icon in the taskbar to display the menu, then click *About*, or double-click the *Endpoint Security Client* icon.
2. Click the *Diagnostics* button.


ZESM Diagnostics

Diagnostics Package

☑ Group Policy Object
☑ Network Environment
☑ Registry Settings
☑ System Information
☑ System Event Logs
☑ Wireless Environment

Status: Idle

3. Check everything in the Diagnostics Package pane, or check only the items that your ZENworks Endpoint Security administrator requests, then click *Create Package*.

   The ZENworks Endpoint Security client creates a `zesmdiagnostics*.enc` file on your desktop, which you can then send to the ZENworks Endpoint Security administrator.