TREND MICRO™

2.0 Trend Micro Safe Lock™

Installation Guide

A powerful lockdown solution for fixed-function computers

Endpoint Security

Trend Micro Incorporated reserves the right to make changes to this document and to the product described herein without notice. Before installing and using the product, review the readme files, release notes, and/or the latest version of the applicable documentation, which are available from the Trend Micro website at:

http://docs.trendmicro.com/en-us/enterprise/trend-micro-safe-lock.aspx

Document Part No.: SLEM26986/150615

Release Date: July 2015

Protected by U.S. Patent No.: Patents pending.

This documentation introduces the main features of the product and/or provides installation instructions for a production environment. Read through the documentation before installing or using the product.

Detailed information about how to use specific features within the product may be available at the Trend Micro Online Help Center and/or the Trend Micro Knowledge Base.

Trend Micro always seeks to improve its documentation. If you have questions, comments, or suggestions about this or any Trend Micro document, please contact us at docs@trendmicro.com.

Evaluate this documentation on the following site:

http://docs.trendmicro.com/en-us/survey.aspx

Table of Contents

Chapter 4: Technical Support

Index

Preface

This Administrator's Guide introduces Trend Micro Safe Lock and guides administrators through installation and deployment.

Topics in this chapter include:

About the Documentation

Trend Micro Safe Lock documentation includes the following:

TABLE 1. Trend Micro Safe Lock Documentation

DOCUMENTATION	DESCRIPTION
Installation Guide	A PDF document that discusses requirements and procedures for installing Safe Lock.
Administrator's Guide	A PDF document that discusses getting started information and Safe Lock usage and management.
Readme file	Contains a list of known issues. It may also contain late-breaking product information not found in the printed documentation.
Knowledge Base	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 website: http://esupport.trendmicro.com

Download the latest version of the PDF documents and Readme at:

http://docs.trendmicro.com

Audience

Trend Micro Safe Lock documentation is intended for administrators responsible for Safe Lock management, including agent installation. These users are expected to have advanced networking and server management knowledge.

Document Conventions

The following table provides the official terminology used throughout the Trend Micro Safe Lock documentation:

TABLE 2. Document Conventions

CONVENTION	DESCRIPTION
UPPER CASE	Acronyms, abbreviations, and names of certain commands and keys on the keyboard
Bold	Menus and menu commands, command buttons, tabs, and options
Italics	References to other documents
`Monospace`	Sample command lines, program code, web URLs, file names, and program output
Navigation > **Path**	The navigation path to reach a particular screen For example, **File** > **Save** means, click **File** and then click **Save** on the interface
Note	Configuration notes
Tip	Recommendations or suggestions
Important	Information regarding required or default configuration settings and product limitations

Convention	Description
 **WARNING!**	Critical actions and configuration options

Chapter 1

Introduction

Trend Micro Safe Lock delivers a simple, no-maintenance solution to lock down and protect fixed-function computers, helping protect businesses against security threats and increase productivity.

Topics in this chapter include:

About Trend Micro Safe Lock

Trend Micro Safe Lock protects fixed-function computers like Industrial Control Systems (ICS), Point of Sale (POS) terminals, and kiosk terminals from malicious software and unauthorized use. By using fewer resources and without the need for regular software or system updates, Safe Lock can reliably secure computers in industrial and commercial environments with little performance impact or downtime.

What's New in This Version

This section lists the new features and enhancements available in each release.

Trend Micro Safe Lock 2.0 Features and Enhancements

Trend Micro Safe Lock 2.0 includes the following new features and enhancements.

TABLE 1-1. New Features

FEATURE	DESCRIPTION
Write Protection	Prevents write access to all files in the Approved List and all objects (files, folders, and registry entries) in the Write Protection List
Integrity Monitoring	Monitors file change events system-wide for files, folders, and the registry
Approved List and Trusted Updater support Digital Signatures	Allow to loading or launching files that have pre-defined digital signatures, even if the files are not in the Approved List
Exception Path	Allow to loading or launching files in a pre-defined “exceptions” folder without adding them to the Approved List
Custom Action	Takes action on blocked files, for example Ignore, Quarantine, or Ask Server (requires Safe Lock Intelligent Manager)

Agent Features and Benefits

Trend Micro Safe Lock includes the following features and benefits.

Application Lockdown

By preventing programs, DLL files, drivers, and scripts not specifically on the Approved List of applications from running (also known as application white listing), Safe Lock provides both improved productivity and system integrity by blocking malicious software and preventing unintended use.

Safe Lock write protection blocks modification and deletion of files, folders, and registry entries.

Exploit Prevention

Known targeted threats like Downad and Stuxnet, as well as new and unknown threats, are a significant risk to ICS and kiosk computers. Systems without the latest operating system updates are especially vulnerable to targeted attacks.

Safe Lock provides both intrusion prevention, which helps prevent threats from spreading to the endpoint, and execution prevention, which helps prevent threats from spreading to the endpoint or from running.

Easy Management

When software needs to be installed or updated, the Trusted Updater and Predefined Trusted Updater List provide an easy way to make changes to the endpoint and automatically add new or modified files to the Approved List, all without having to unlock Trend Micro Safe Lock.

Small Footprint

Compared to other endpoint security solutions that rely on large pattern files that require constant updates, application lockdown uses less memory and disk space, without the need to download updates.

Role Based Administration

Trend Micro Safe Lock provides a separate administrator and Restricted User account, providing full control during installation and setup, as well as simplified monitoring and maintenance after deployment.

Graphical and Command Line Interfaces

Anyone who needs to check the software can use the console, while system administrators can take advantage of the command line interface (CLI) to access all of the features and functions available.

Trend Micro Portable Security Compatible

Out-of-the-box compatibility with Trend Micro Portable Security ensures straightforward removal of any threats that do get on to the endpoint, without the need to update the Approved List or unlock the endpoint.

Self Protection

Self Protection provides ways for Trend Micro Safe Lock to defend the processes and other resources required to function properly. Self Protection helps thwart attempts by programs or actual users to disable the software.

Self Protection blocks all attempts to terminate the following services:

- Trend Micro Safe Lock Service (`WkSrv.exe`)
- Trend Micro Unauthorized Change Prevention Service (`TMBMSRV.exe`)
- Trend Micro Personal Firewall (`TmPfw.exe`)

Safe Lock Requirements

This section introduces Safe Lock system requirements and upgrade limitations.

Hardware Requirements

Trend Micro Safe Lock does not have specific hardware requirements beyond those specified by the operating system, with the following exceptions:

TABLE 1-2. Required Hardware for Safe Lock

HARDWARE/SOFTWARE	DESCRIPTION
Available disk space	200MB minimum 300MB recommended
Monitor resolution	640x480

Important

Safe Lock cannot be installed on a system that already runs one of the following:

- Trend Micro OfficeScan
- Trend Micro Titanium
- Another Trend Micro endpoint solution

Operating Systems

Note

Memory Randomization, API Hooking Prevention, and DLL Injection Prevention are not supported on 64-bit platforms.

TABLE 1-3. List of Supported Operating Systems

WINDOWS VERSION TYPE	WINDOWS VERSION NAME
Windows Clients	Windows 2000 SP4* (32-bit) **Note** *Without Update Rollup, this version of Windows does not support DLL/Driver Lockdown, Integrity Monitoring, and the Predefined Trusted Updater.
	Windows XP SP1*/SP2/SP3 (32-bit) (except Starter and Home editions) **Note** *This version of Windows does not support DLL/Driver Lockdown, Integrity Monitoring, and the Predefined Trusted Updater. Safe Lock does not support a custom action of “quarantine” on Windows XP or Windows 2003.
	Windows Vista No-SP/SP1/SP2 (32-bit) (except Starter and Home editions)
	Windows 7 No-SP/SP1 (32-bit and 64-bit) (except Starter and Home editions)
	Windows 8 No-SP (32-bit and 64-bit)
	Windows 8.1 No-SP (32-bit and 64-bit)

<table>
<tr><th>Windows Version Type</th><th>Windows Version Name</th></tr>
<tr><td rowspan="8">Windows Server</td><td>Windows 2000 Server SP4* (32-bit)

  Note
*Without Update Rollup, this version of Windows does not support DLL/Driver Lockdown, Integrity Monitoring, and the Predefined Trusted Updater.</td></tr>
<tr><td>Windows Server 2003 SP1/SP2 (32-bit)

  Note
Safe Lock does not support a custom action of “quarantine” on Windows XP or Windows 2003.</td></tr>
<tr><td>Windows Server 2003 R2 No-SP/SP2 (32-bit and 64-bit)

  Note
Safe Lock does not support a custom action of “quarantine” on Windows XP or Windows 2003.</td></tr>
<tr><td>Windows Server 2008 SP1/SP2 (32-bit and 64-bit)</td></tr>
<tr><td>Windows Server 2008 R2 No-SP/SP1 (64-bit)</td></tr>
<tr><td>Windows Server 2012 No-SP (64-bit)</td></tr>
<tr><td>Windows Server 2012 R2 No-SP (64-bit)</td></tr>
</table>

WINDOWS VERSION TYPE	WINDOWS VERSION NAME
Windows Embedded Standard	Windows (Standard) XP Embedded SP1*/SP2 (32-bit) **Note** *This version of Windows does not support DLL/Driver Lockdown, Integrity Monitoring, and the Predefined Trusted Updater. Safe Lock does not support a custom action of “quarantine” on Windows XP or Windows 2003.
	Windows Embedded Standard 2009 (32-bit)
	Windows Embedded Standard 7 (32-bit and 64-bit)
	Windows Embedded Standard 8 (32-bit and 64-bit)
	Windows Embedded Standard 8.1 (32-bit and 64-bit)
Windows Embedded POSReady	Windows Embedded POSReady (32-bit)
	Windows Embedded POSReady 2009 (32-bit)
	Windows Embedded POSReady 7 (32-bit and 64-bit)
Windows Embedded Enterprise	Windows Embedded Enterprise XP SP1*/SP2/SP3 (32-bit) **Note** *This version of Windows does not support DLL/Driver Lockdown, Integrity Monitoring, and the Predefined Trusted Updater. Safe Lock does not support a custom action of “quarantine” on Windows XP or Windows 2003.
	Windows Embedded Enterprise Vista (32-bit)
	Windows Embedded Enterprise 7 (32-bit and 64-bit)

WINDOWS VERSION TYPE	WINDOWS VERSION NAME
Windows Embedded Server	Windows Embedded Server 2003 SP1/SP2 (32-bit) **Note** Safe Lock does not support a custom action of "quarantine" on Windows XP or Windows 2003.
	Windows Embedded Server 2003 R2 (32-bit) **Note** Safe Lock does not support a custom action of "quarantine" on Windows XP or Windows 2003.
	Windows Embedded Server 2008 (32-bit and 64-bit)
	Windows Embedded Server 2008 R2 (64-bit)
	Windows Embedded Server 2012 (64-bit)
	Windows Embedded Server 2012 R2 (64-bit)

Note

See the latest Safe Lock readme file for the most up-to-date list of supported operating systems for agents.

Agent Upgrade Preparation

WARNING!

Depending on the installation method you select, Safe Lock versions require different preparation before upgrading.

Download the latest updates from the Trend Micro Software Download Center. Go to http://downloadcenter.trendmicro.com/.

Before upgrading, take the appropriate action below for your installation method and installed Safe Lock agent version:

TABLE 1-4. Upgrade Actions Required by Installation Method and Installed Agent Version

INSTALLATION METHOD	INSTALLED AGENT VERSION	REQUIRED ACTION	SETTINGS RETAINED
Local installation using Windows Installer	1.0	No preparation needed	No settings retained
	1.1	No preparation needed	Compatible settings retained
	2.0 or later	No preparation needed	No settings retained
Local installation using Command Line Interface Installer	1.0	Manually uninstall	No settings retained
	1.1	No preparation needed	Compatible settings retained
	2.0 or later	Manually uninstall	No settings retained
Remote **Note** Remote Safe Lock installations are possible with Safe Lock Intelligent Manager.	1.0	Manually uninstall	No settings retained
	1.1	Manually uninstall	No settings retained
	2.0 or later	Manually uninstall	No settings retained

Agent Use Overview

Trend Micro Safe Lock is a whitelist solution that locks down computers, preventing all applications not on the Approved List from running. Safe Lock can be configured and maintained using the graphical user interface (GUI) agent console or the command line interface (CLI). System updates can be applied without turning off Application Lockdown at the endpoint through the Predefined Trusted Updater List or by using the Trusted Updater.

Consider this typical use case scenario:

1. Set up the Approved List and turn on Application Lockdown on the endpoint so that unapproved applications cannot be run.
2. Use the Trusted Updater to update or install software whose installer is not on the Predefined Trusted Updater list.
3. Configure and enable the Restricted User account for later maintenance.

If someone tries to run an application not specifically on the Approved List, the following message displays:

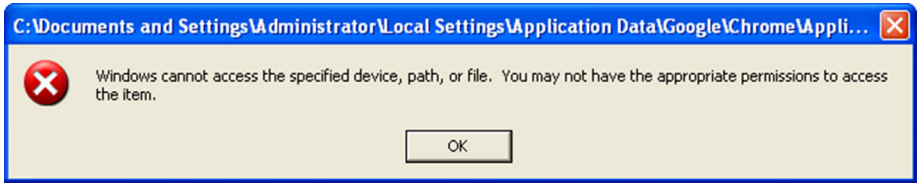


FIGURE 1-1. Trend Micro Safe Lock blocking message

Chapter 2

Local Agent Installation

This chapter describes local Trend Micro Safe Lock agent installation and setup procedures.

Topics in this chapter include:

Local Installation Overview

Trend Micro Safe Lock can be installed using either the Windows Installer or the command line interface (CLI) installer.

WARNING!

Depending on the installation method you select, Safe Lock versions require different preparation before upgrading. See *Agent Upgrade Preparation on page 1-9* for more information.

TABLE 2-1. Safe Lock Local Installation Methods

INSTALLATION METHOD	BENEFITS
Windows Installer	The Windows Installer provides simplified step-by-step installation wizard for first-time or single installation. Also suitable for preparing for mass deployment for cloned computer systems.
Command line interface installer	The command line interface (CLI) installer provides silent installation and can be integrated into a batch file for mass deployment.

To customize installations using either the Windows Installer or the command line interface (CLI) installer, modify the Setup.ini file. See *Installation Customization using a Setup.ini File on page 2-14*.

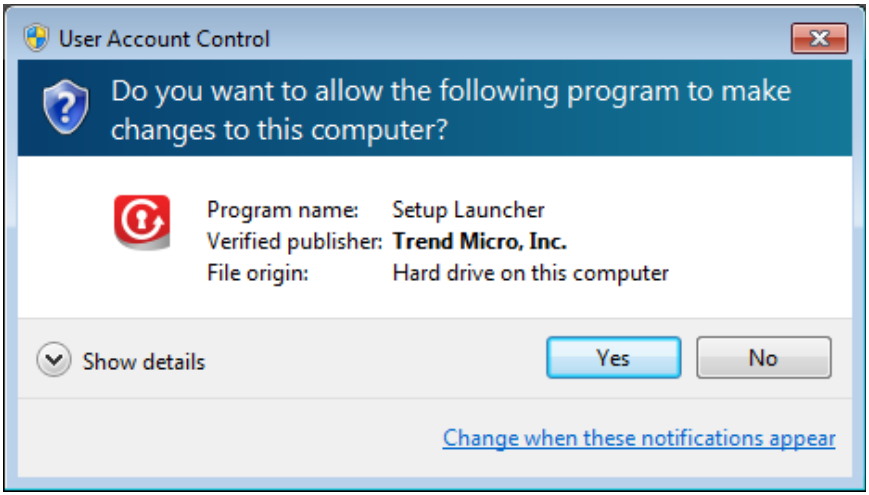
Installing from Windows

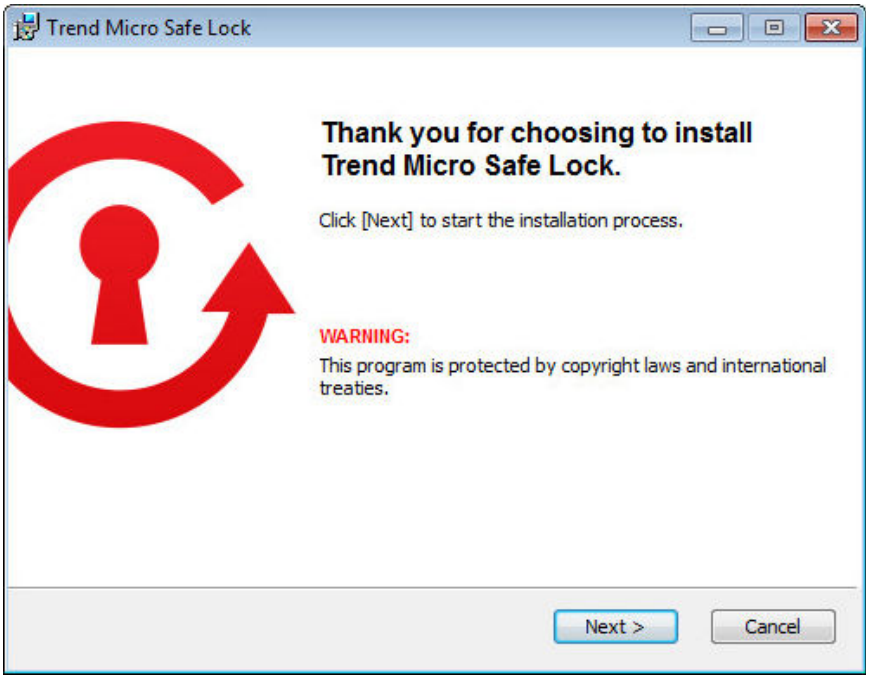
To install Trend Micro Safe Lock, you must log on using an account with administrator privileges.

Procedure

1. Double-click `Setup.exe`.

   If a **User Account Control** warning from Windows appears, click **Yes**.


User Account Control
Do you want to allow the following program to make changes to this computer?
Program name: Setup Launcher
Verified publisher: Trend Micro, Inc.
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear


Trend Micro Safe Lock
Thank you for choosing to install Trend Micro Safe Lock.
Click [Next] to start the installation process.
WARNING:
This program is protected by copyright laws and international treaties.
Next >
Cancel

2. When the installation wizard opens, click **Next**.

Note

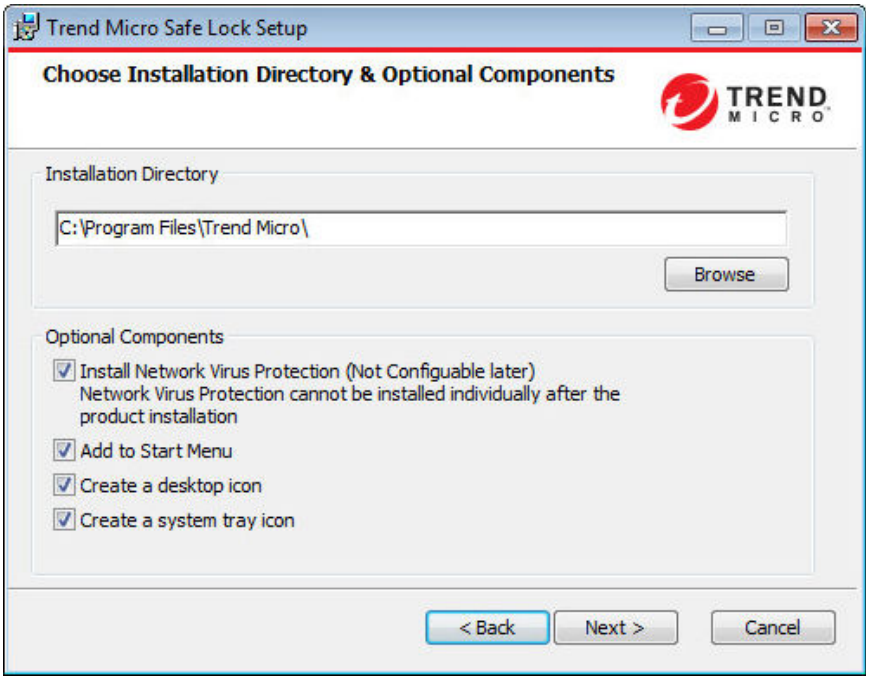
If there is another version of Safe Lock on the endpoint, the installer will remove it before installing the latest version.

3. Read the license agreement, select **I accept the terms in the License Agreement**, and click **Next**.

4. Make any necessary changes to the installation options, and click **Next**.

Important

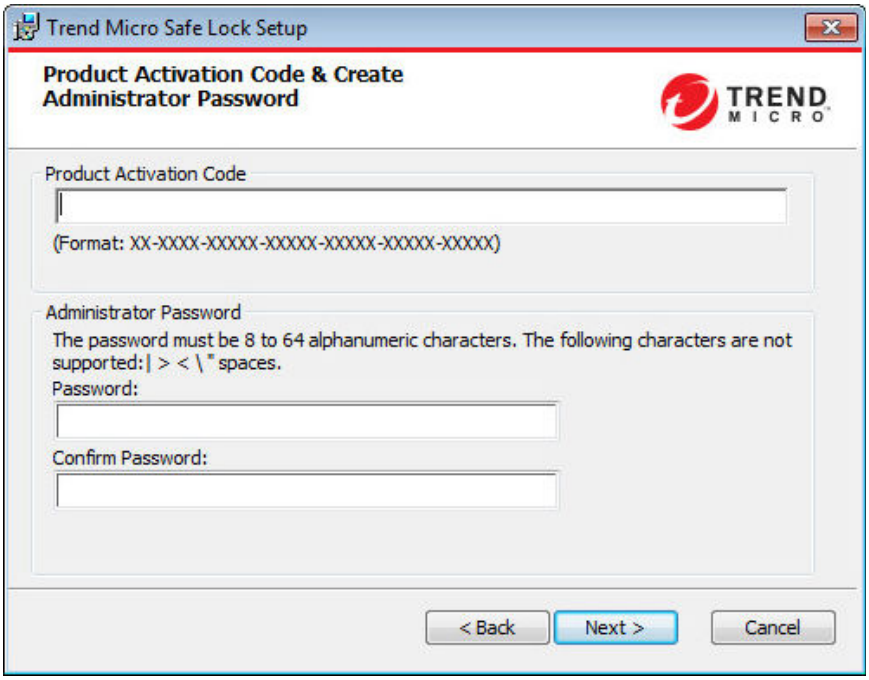
Network Virus Protection can only be installed during the initial program installation, but it can be disabled after installation, if necessary. See *Exploit Prevention Settings* in the Administrator's Guide for more information.



5. Provide the Activation Code and specify an administrator password for Trend Micro Safe Lock.

Note

The password must be 8 to 64 alphanumeric characters. The following characters are not supported: | > < \ " spaces. The Safe Lock administrator password is unrelated to the Windows administrator password.

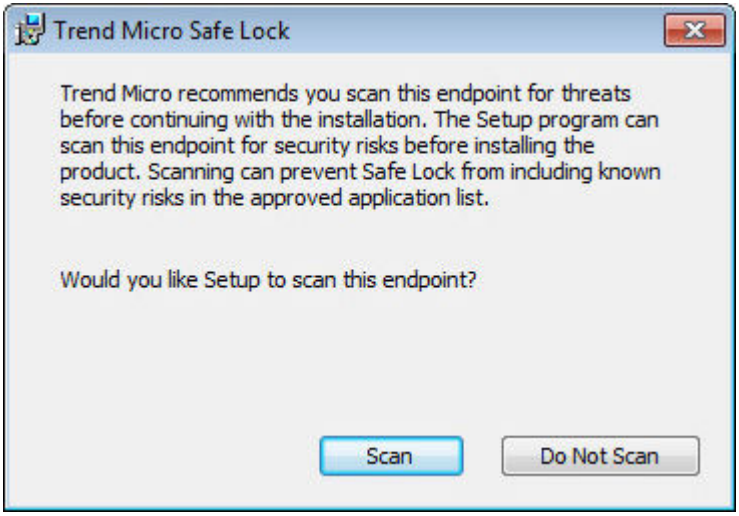


WARNING!

Do not forget the Safe Lock administrator password. The only way to recover after losing the Safe Lock administrator password is by reinstalling the operating system.

6. Click **Next**.

A message appears asking if you would like to scan the endpoint for threats before continuing with the installation.



7. Optionally, scan the endpoint for threats before continuing with the installation. Trend Micro recommends you perform this scan.

   - To scan the endpoint for threats, click **Scan**.

     a. The **Endpoint Prescan** window appears.

     b. To customize the scan settings, click **Edit Scan Settings**.

     c. Click **Scan Now**.

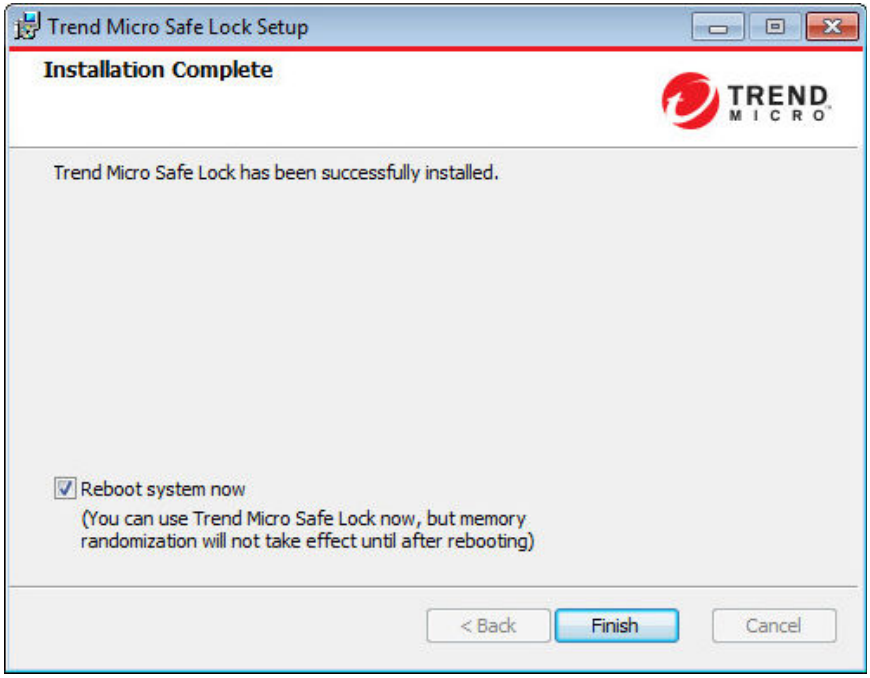
        If Endpoint Prescan detects security risks, Trend Micro recommends canceling the installation. Remove threats from the endpoint and try again. If critical programs are detected as threats, confirm that the endpoint is secure and that the versions of the programs installed do not contain threats. Ignore detected threats only if you are absolutely certain that they are false positives.

Tip

Trend Micro provides solutions for detecting and removing threats. For endpoints with limited or no network access, Trend Micro recommends using Trend Micro Portable Security. See *Trend Micro Portable Security Compatible on page 1-4*. For more information about this and other solutions from Trend Micro, go to http://trendmicro.com/.

- To skip scanning, click **Do Not Scan**.

8. When the **Installation Complete** window displays, click **Finish**.



Note

Restarting the endpoint after installation is not necessary, but memory randomization will not be enabled until the endpoint has restarted. See *Exploit Prevention Settings* in the Administrator's Guide for more information.

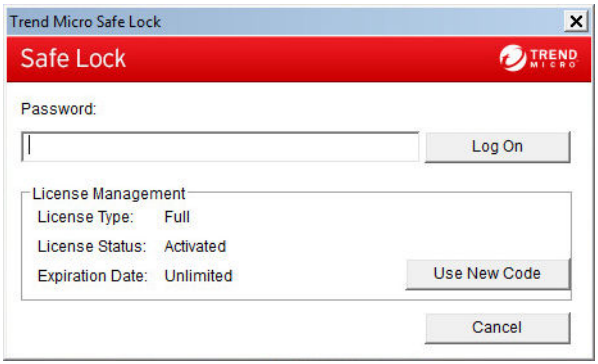
Setting Up the Approved List

Before Trend Micro Safe Lock can protect the endpoint, it must check the endpoint for existing applications and installers necessary for the system to run correctly.

Procedure

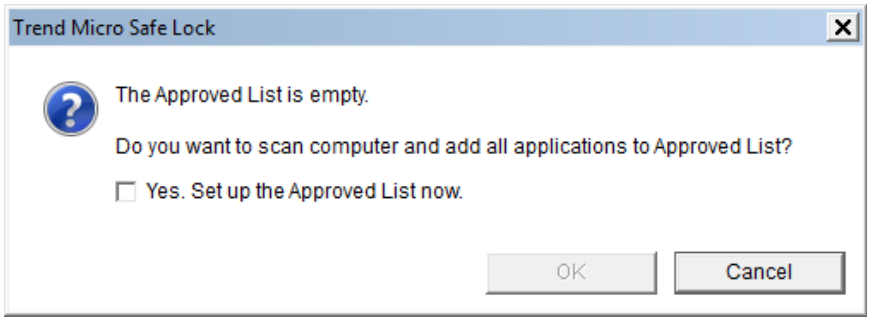
1. Open the Safe Lock console.

   The Safe Lock log on screen appears.



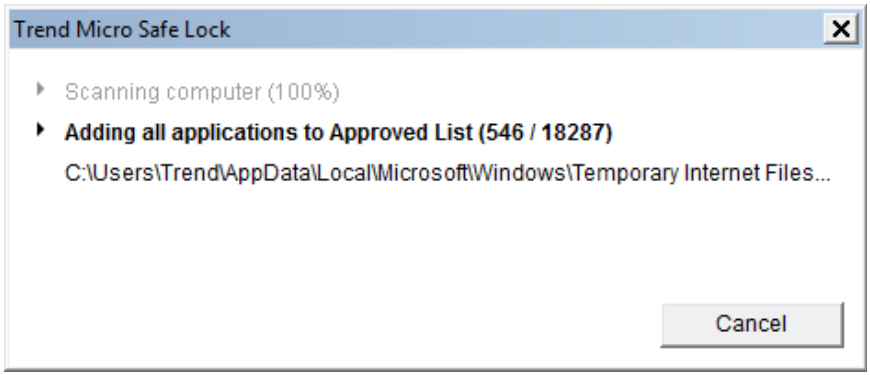
2. Provide the password and click **Login**.

Safe Lock asks if you want to set up the Approved List now.

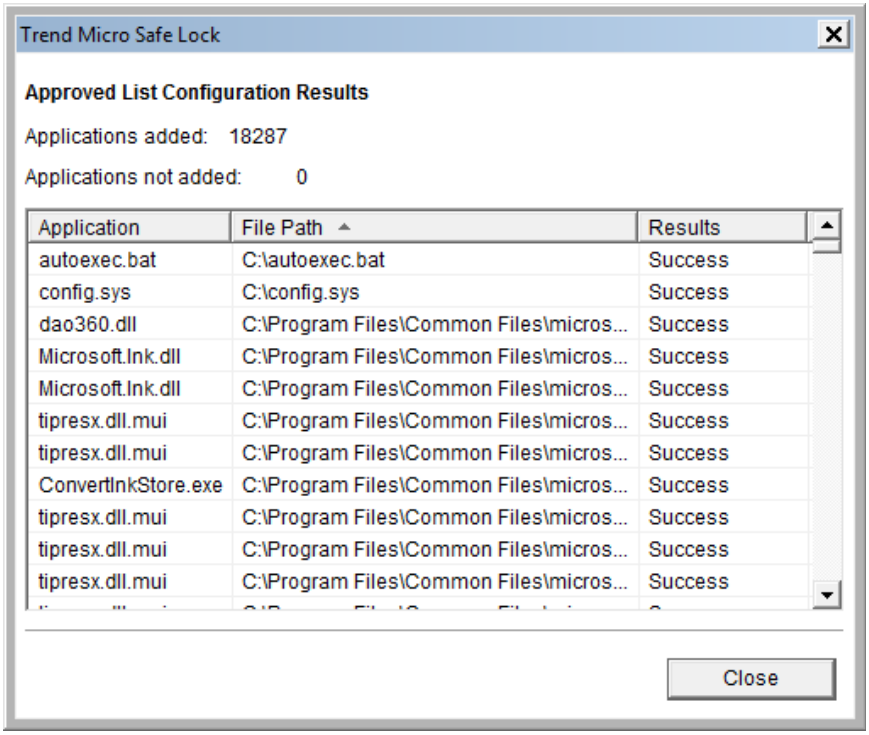


3. At the notification window, select **Yes. Set up the Approved List now** and click **OK**.

Safe Lock scans the endpoint and adds all applications to the Approved List.



Safe Lock displays the Approved List Configuration Results.



Note

When Trend Micro Safe Lock Application Lockdown is on, only applications that are in the Approved List will be able to run.

4. Click **Close**.

Installation Using the Command Line

Administrators can install Safe Lock from the command line interface (CLI) or using a batch file, allowing for silent installation and mass deployment. For mass deployment,

Trend Micro recommends first installing Safe Lock on a test computer since a customized installation may require a valid configuration file and Approved List. See the Trend Micro Safe Lock Administrator's Guide for more information about the Approved List and configuration file.

WARNING!

Do not forget the Safe Lock administrator password. The only way to recover after losing the Safe Lock administrator password is by reinstalling the operating system.

Important

Network Virus Protection can only be installed during the initial program installation, but it can be disabled after installation, if necessary. See *Exploit Prevention Settings* in the Administrator's Guide for more information.

Note

The password must be 8 to 64 alphanumeric characters. The following characters are not supported: | > < \ " spaces. The Safe Lock administrator password is unrelated to the Windows administrator password.

Restarting the endpoint after installation is not necessary, but memory randomization will not be enabled until the endpoint has restarted. See *Exploit Prevention Settings* in the Administrator's Guide for more information.

Installer Command Line Interface Parameters

The following table lists the commands available for `Setup.exe`.

TABLE 2-2. Safe Lock Installer Command Line Options

PARAMETER	VALUE	DESCRIPTION
`-q`		Run the installer silently
`-p`	<administrator_password>	Specify the administrator password
`-d`	<path>	Specify the installation path

PARAMETER	VALUE	DESCRIPTION
-ac	<activation_code>	Specify the activation code
-nd		Do not create a desktop shortcut
-ns		Do not add a shortcut to the Start menu
-ni		Hide the task tray icon
-nfw		Disable the network antivirus function
-cp	<path>	Specify the Safe Lock configuration file **Note** The Safe Lock configuration file can be exported after installing Safe Lock.
-lp	<path>	Specify the Approved List **Note** After installing Safe Lock and creating the Approved List, the list can be exported.
-qp	<path>	Specify the folder path for quarantined files when custom action is set to “quarantine” mode.
-nrca		Disable the Root Cause Analysis (RCA) report
-nps		Do not execute Prescan
-ips		Do not cancel installation when Prescan detects threats

An example command line interface (CLI) install would look like this:

```
setup.exe -q -ac XX-XXXX-XXXXX-XXXXX-XXXXX-XXXXX-XXXXX -p
P@ssW0Rd -nd
```

Important

An administrator password and Activation Code must be specified for the installation to continue.

Installation Customization using a Setup.ini File

Note

Arguments specified at the command line interface (CLI) take higher priority than the setup file, which takes higher priority over the default values. For example, if the switch `-nd` is added to `setup.exe`, and `setup.ini` contains `NO_DESKTOP=0`, the switch will take precedence, and a Safe Lock desktop shortcut will not be created.

To change the default installation parameters using a Setup.ini file, create a text file called `setup.ini` in the same folder as `setup.exe`.

Example Setup.ini File

The following is an example of `setup.ini` file syntax:

```
[Property]
ACTIVATION_CODE=XX-XXXX-XXXXX-XXXXX-XXXXX-XXXXX-XXXXX
NO_SYSTRAY=1
LIST_PATH=c:\temp\list.db
```

Setup.ini File Arguments

Note

Arguments specified at the command line interface (CLI) take higher priority than the setup file, which takes higher priority over the default values. For example, if the switch `-nd` is added to `setup.exe`, and `setup.ini` contains `NO_DESKTOP=0`, the switch will take precedence, and a Safe Lock desktop shortcut will not be created.

The following tables list the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

EventLog Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-3. Setup.ini File [EVENTLOG] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
ENABLE	Log events related to Safe Lock	• 1: Log • 0: Do not log	1	No
LEVEL_WARNINGLOG	Log "Warning" level events related to Safe Lock	• 1: Log • 0: Do not log	1	No
LEVEL_INFORMATIONLOG	Log "Information" level events related to Safe Lock	• 1: Log • 0: Do not log	1	No
BLOCKEDACCESSLOG	Log files blocked by Safe Lock	• 1: Log • 0: Do not log	1	No
APPROVEDACCESSLOG	Log files approved by Safe Lock	• 1: Log • 0: Do not log	1	No
APPROVEDACCESSLOG_TRUSTEDUPDATER	Log Trusted Updater approved access	• 1: Log • 0: Do not log	1	No
APPROVEDACCESSLOG_DLLDRIVER	Log DLL/Driver approved access	• 1: Log • 0: Do not log	0	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
APPROVEDACCESSLOG_EXCEPTIONPATH	Log Application Lockdown exception path approved access	• 1: Log • 0: Do not log	1	No
APPROVEDACCESSLOG_TRUSTEDCERT	Log Trusted Certifications approved access	• 1: Log • 0: Do not log	1	No
APPROVEDACCESSLOG_WRITEPROTECTION	Log Write Protection approved access	• 1: Log • 0: Do not log	1	No
SYSTEMEVENTLOG	Log events related to the system	• 1: Log • 0: Do not log	1	No
SYSTEMEVENTLOG_EXCEPTIONPATH	Log exceptions to Application Lockdown	• 1: Log • 0: Do not log	1	No
SYSTEMEVENTLOG_WRITEPROTECTION	Log Write Protection events	• 1: Log • 0: Do not log	1	No
LISTLOG	Log events related to the Approved list	• 1: Log • 0: Do not log	1	No
USBMALWAREPROTECTIONLOG	Log events that trigger USB Malware Protection	• 1: Log • 0: Do not log	1	No
EXECUTIONPREVENTIONLOG	Log events that trigger Execution Prevention	• 1: Log • 0: Do not log	1	No
NETWORKVIRUSPROTECTIONLOG	Log events that trigger Network Virus Protection	• 1: Log • 0: Do not log	1	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
INTEGRITYMONITORINGLOG_FILECREATED	Log file and folder created events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_FILEMODIFIED	Log file modified events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_FILEDELETED	Log file and folder deleted events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_FILERENAMED	Log file and folder renamed events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_REGVALUEMODIFIED	Log registry value modified events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_REGVALUEDELETED	Log registry value deleted events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_REGKEYCREATED	Log registry key created events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_REGKEYDELETED	Log registry key deleted events	• 1: Log • 0: Do not log	1	No
INTEGRITYMONITORINGLOG_REGKEYRENAMED	Log registry key renamed events	• 1: Log • 0: Do not log	1	No

Property Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-4. Setup.ini File [PROPERTY] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
ACTIVATION_CODE	Activation Code	<activation_code>	<empty>	No
NO_DESKTOP	Create a shortcut on desktop	• 1: Do not create shortcut • 0: Create shortcut	0	No
NO_STARTMENU	Create a shortcut in the Start menu	• 1: Do not create shortcut • 0: Create shortcut	0	No
NO_SYSTRAY	Display the system tray icon and Windows notifications	• 1: Do not create system tray icon • 0: Create system tray icon	0	No
NO_NSC	Install firewall	• 1: Do not create firewall • 0: Create firewall	0	No
CONFIG_PATH	Configuration file path	<path>	<empty>	No
LIST_PATH	Approved List path for import	<path>	<empty>	No
APPLICATIONFOLDER	Installation path for agent program	<path>	<empty>	No
MANAGED_MODE	Specify if Safe Lock is managed by the Safe Lock Intelligent Manager server	• 0: Standalone mode • 1: Managed mode	0	No
PASSWORD	Password which is used for **SLCmd.exe** and	<password>	<empty>	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
	Safe Lock console			
CUSTOM_ACTION	Custom action for blocked events	• 0: Ignore • 1: Quarantine • 2: Ask server	0	No
QUARANTINE_FOLDER_PATH	Quarantine path for agent program	<path>	<empty>	No
ROOT_CAUSE_ANALYSIS	Enable Root Cause Analysis reporting	• 0: Disable • Other value: Enable	1	No
INTEGRITY_MONITOR	Enable Integrity Monitor	• 0: Disable • Other value: Enable	0	No
PRESCAN	Prescan the endpoint before installing Safe Lock	• 1: Prescan the endpoint • 0: Do not prescan the endpoint	1	No
MAX_EVENT_DB_SIZE	Maximum database file size (MB)	Positive integer	1024	No
WEL_SIZE	Windows Event Log size (KB)	Positive integer	1024	No
WEL_RETENTION	Windows Event Log option when maximum event log size is reached on Windows Event Log.	For Windows XP or earlier platforms: • 0: Overwrite events as needed • 1 - 365: Overwrite events older than (1-365) days	0	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
		• `-1`: Do not overwrite events (Clear logs manually) For Windows Vista or later platforms: • `0`: Overwrite events as needed (oldest events first) • `1`: Archive the log when full, do not overwrite events • `-1`: Do not overwrite events (Clear logs manually)		
`WEL_IN_SIZE`	Windows Event Log size for Integrity Monitor events (KB)	Positive integer	`1024`	No
`WEL_IN_RETENTION`	Windows Event Log option when maximum event log size for Integrity Monitor events is reached on Windows Event Log.	For Windows XP or earlier platforms: • `0`: Overwrite events as needed • `1 - 365`: Overwrite events older than (1-365) days • `-1`: Do not overwrite events (Clear logs manually) For Windows Vista or later platforms:	`0`	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
		• 0: Overwrite events as needed (oldest events first) • 1: Archive the log when full, do not overwrite events • -1: Do not overwrite events (Clear logs manually)		

SILENT_INSTALL	Execute installation in silent mode	• 1: Use silent mode
		• 0: Do not use silent mode
		
		Important
		To use silent mode, you must also specify the ACTIVATION_CODE and PASSWORD keys and values. For example:
		`[PROPERTY]`
		`ACTIVATION_CODE=XX-XXXX-XXX`
		`XX-XXXXX-XXXXX-XXXXX-XXXXX`
		`PASSWORD=P@ssW0Rd`
		`SILENT_INSTALL=1`
			0	No

Server Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-5. Setup.ini File [SERVER] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
HOSTNAME	Server host name	<host_name>	<empty>	No
PORT_FAST	Server listen port for fast lane	1 - 65535	<empty>	No
PORT_SLOW	Server listen port for slow lane	1 - 65535	<empty>	No
CERT	Certificate file name	<certificate_file_name>	<empty>	No
API_KEY	API key	<API_key>	<empty>	No

Agent Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-6. Setup.ini File [AGENT] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
PORT	Agent listening port	1 - 65535	<empty>	No
SSL_ALLOW_BEAST	Handles possible security flaws in SSL3 and TLS 1.0 protocols for BEAST attacks	• 0: Protect against BEAST attacks • <other_value>: Do not implement any security workarounds for BEAST vulnerabilities	1	No

Message Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-7. Setup.ini File [MESSAGE] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
REGISTER_TRIGGER	Register message trigger	• 1: Immediately • 2: On demand	1	No
UNREGISTER_TRIGGER	Unregister message trigger	• 1: Immediately • 2: On demand	1	No
UPDATESTATUS_TRIGGER	Update status message trigger	• 1: Immediately • 2: On demand	1	No
UPLOADBLOCKEDEVENT_TRIGGER	Upload blocked event message trigger	• 1: Immediately • 2: On demand	1	No
CHECKFILEHASH_TRIGGER	Check file hash message trigger	• 1: Immediately • 2: On demand	1	No
QUICKSCANFILE_TRIGGER	Quick scan file message trigger	• 1: Immediately • 2: On demand	1	No

MessageRandomization Section

Note

Safe Lock agents respond as soon as possible to direct requests from Safe Lock Intelligent Manager.

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-8. Setup.ini File [MESSAGERANDOMIZATION] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
TOTAL_GROUP_NUM	Number of groups controlled by the server controls	0 - 2147483647	0	No
OWN_GROUP_INDEX	Index of group which this agent belongs to	0 - 2147483647	0	No
TIME_PERIOD	Maximum amount of time agents have to upload data (in seconds)	0 - 2147483647	0	No

Proxy Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-9. Setup.ini File [PROXY] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
MODE	Proxy mode	• 0: No proxy used • 1: Proxy used with manual settings • 2: Proxy used with settings retrieved from Internet Explorer automatically	0	No
HOSTNAME	Proxy host name	<host_name>	<empty>	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
PORT	Proxy port	1 - 65535	<empty>	No
USERNAME	Proxy user name	<user_name>	<empty>	No
PASSWORD	Proxy password	<password>	<empty>	No

Prescan Section

The following table lists the commands available for `setup.ini`. If no value is specified in the setup file, the default value will be used.

TABLE 2-10. Setup.ini File [PRESCAN] Section Arguments

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
IGNORE_THREAT	Cancel installation after detecting malware threat during prescan **Note** Only valid during silent installations.	• 0: Cancel • 1: Continue installation after detecting malware threat during prescan	0	No
REPORT_FOLDER	An absolute folder path where prescan result reports are saved.	• <folder_path> • <empty>: Defaults to %windir%\temp\prescan\log	<empty>	No
SCAN_TYPE	The type of scan executed during silent installation	• Full: Scan all folders on the endpoint.	Full	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED

	Note
	The selected value is used as the default value for a UI installation.
		• `Quick`: Scans the following folders:
		  • Fixed root drives
		  For example:
		  `c:\`
		  `d:\`
		  • System root folder
		  For example, `c:\Windows`
		  • System folder
		  For example, `c:\Windows\System`
		  • System32 folder
		  For example, `c:\Windows\System32`
		  • Driver folder
		  For example, `c:\Windows\System32\Drivers`
		  • Temp folder
		  For example, `c:\Users\Trend\AppData\Local\Temp`		

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
		• Desktop folder including sub folders and files For example, `c:\Users\Trend\Desktop` • `Specific`: Scan folders specified with `SPECIFIC_FOLDER` entries		
`COMPRESS_LAYER`	The number of compressed layers to scan when a compressed file is scanned.	`1 - 20`	`2`	No
`SCAN_REMOVABLE_DRIVE`	Scan removable drives	• `1`: Scan removable drives • <other_value>: Do not scan removable drives	`0`	No
`SPECIFIC_FOLDER`	An absolute folder path to scan when the scan type is [Specific]	<folder_path> Multiple folders can be specified by creating new entries whose name starting with `SPECIFIC_FOLDER`. Every entry name needs to be unique. For example:	<empty>	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
		SPECIFIC_FOLDER=c:\folder1 SPECIFIC_FOLDER2=c:\folder2 SPECIFIC_FOLDER3=c:\folder3		
EXCLUDED_FILE	An absolute file path to exclude from scanning	<file_path> Multiple files can be specified by creating new entries whose name starting with EXCLUDED_FILE. Every entry name needs to be unique. For example: EXCLUDED_FILE=c:\file1.exe EXCLUDED_FILE2=c:\file2.exe EXCLUDED_FILE3=c:\file3.exe	<empty>	No
EXCLUDED_FOLDER	An absolute folder path to exclude from scanning	<folder_path> Multiple folders can be specified by creating new entries whose name starting with EXCLUDED_FOLDER. Every entry name needs to be unique. For example: EXCLUDED_FOLDER=c:\file1.exe	<empty>	No

KEY	DESCRIPTION	POSSIBLE VALUES	DEFAULT VALUE	ENCRYPTED
		EXCLUDED_FOLDER2=c:\file2.exe EXCLUDED_FOLDER3=c:\file3.exe		
EXCLUDED_EXTENSION	A file extension to exclude from scanning	<file_extension> Multiple extensions can be specified by creating new entries whose name starting with EXCLUDED_EXTENSION. Every entry name needs to be unique. For example: EXCLUDED_EXTENSION=bmp EXCLUDED_EXTENSION2=png	<empty>	No

Chapter 3

Local Agent Uninstallation

This chapter describes Trend Micro Safe Lock agent uninstallation procedures.

Topics in this chapter include:

Uninstalling Agents from Windows

Note

The Safe Lock administrator password is required to uninstall the software from the endpoint.

Procedure

1. On an endpoint with the Safe Lock agent installed, launch Trend Micro Safe Lock Setup.

   Depending on your operating system, do one of the following:

OPTION	DESCRIPTION
If you use one of the following operating systems: • Windows Server 2012 • Windows Server 2008 • Windows 8 • Windows 7 • Windows Vista	a. Go to **Start** > **Control Panel** > **Uninstall a program**. b. In the list, double-click Trend Micro Safe Lock.
If you use one of the following operating systems: • Windows Server 2003 • Windows XP • Windows 2000	a. Go to **Start** > **Control Panel** > **Add or Remove Programs**. b. In the list, select Trend Micro Safe Lock. c. Click **Remove**.

   Safe Lock Setup opens in uninstaller mode.

2. After Safe Lock Setup opens, click **Next**.

3. Provide the Safe Lock administrator password, and click **Next**.

4. After the software is finished uninstalling, click **Finish**.

Chapter 4

Technical Support

This chapter describes how to find solutions online, use the Support Portal, and contact Trend Micro.

Topics include:

Troubleshooting Resources

Before contacting technical support, consider visiting the following Trend Micro online resources.

Using the Support Portal

The Trend Micro Support Portal is a 24x7 online resource that contains the most up-to-date information about both common and unusual problems.

Procedure

1. Go to http://esupport.trendmicro.com.
2. Select a product or service from the appropriate drop-down list and specify any other related information.

   The **Technical Support** product page appears.
3. Use the **Search Support** box to search for available solutions.
4. If no solution is found, click **Submit a Support Case** from the left navigation and add any relevant details, or submit a support case here:

   http://esupport.trendmicro.com/srf/SRFMain.aspx

   A Trend Micro support engineer investigates the case and responds in 24 hours or less.

Trend Community

To get help, share experiences, ask questions, and discuss security concerns with other users, enthusiasts, and security experts, go to:

http://community.trendmicro.com/

Contacting Trend Micro

In the United States, Trend Micro representatives are available by phone, fax, or email:

Address	Trend Micro, Inc. 10101 North De Anza Blvd., Cupertino, CA 95014
Phone	Toll free: +1 (800) 228-5651 (sales) Voice: +1 (408) 257-1500 (main)
Fax	+1 (408) 257-2003
Website	http://www.trendmicro.com
Email address	support@trendmicro.com

- Worldwide support offices:

  http://www.trendmicro.com/us/about-us/contact/index.html

- Trend Micro product documentation:

  http://docs.trendmicro.com

Related information

↪ *Speeding Up the Support Call*

Speeding Up the Support Call

To improve problem resolution, have the following information available:

- Steps to reproduce the problem
- Appliance or network information
- Computer brand, model, and any additional hardware connected to the endpoint
- Amount of memory and free hard disk space
- Operating system and service pack version
- Endpoint agent version

- Serial number or activation code
- Detailed description of install environment
- Exact text of any error message received

Other Resources

In addition to solutions and support, there are many other helpful resources available online to stay up to date, learn about innovations, and be aware of the latest security trends.

Related information

➥ *TrendEdge*
➥ *Download Center*
➥ *TrendLabs*

TrendEdge

Find information about unsupported, innovative techniques, tools, and best practices for Trend Micro products and services. The TrendEdge database contains numerous documents covering a wide range of topics for Trend Micro partners, employees, and other interested parties.

See the latest information added to TrendEdge at:

http://trendedge.trendmicro.com/

Download Center

From time to time, Trend Micro may release a patch for a reported known issue or an upgrade that applies to a specific product or service. To find out whether any patches are available, go to:

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

If a patch has not been applied (patches are dated), open the Readme file to determine whether it is relevant to your environment. The Readme file also contains installation instructions.

TrendLabs

TrendLabs℠ is a global network of research, development, and action centers committed to 24x7 threat surveillance, attack prevention, and timely and seamless solutions delivery. Serving as the backbone of the Trend Micro service infrastructure, 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.

TrendLabs monitors the worldwide threat landscape to deliver effective security measures designed to detect, preempt, and eliminate attacks. The daily culmination of these efforts is shared with customers through frequent virus pattern file updates and scan engine refinements.

Learn more about TrendLabs at:

http://cloudsecurity.trendmicro.com/us/technology-innovation/experts/index.html#trendlabs

About Trend Micro

As a global leader in cloud security, Trend Micro develops Internet content security and threat management solutions that make the world safe for businesses and consumers to exchange digital information. With over 20 years of experience, Trend Micro provides top-ranked client, server, and cloud-based solutions that stop threats faster and protect data in physical, virtualized, and cloud environments.

As new threats and vulnerabilities emerge, Trend Micro remains committed to helping customers secure data, ensure compliance, reduce costs, and safeguard business integrity. For more information, visit:

http://www.trendmicro.com

Index

TREND MICRO INCORPORATED

225 E. John Carpenter Freeway, Suite 1500
Irving, Texas 75062 U.S.A.
Phone: +1 (817) 569-8900, Toll-free: (888) 762-8736
Email: support@trendmicro.com

www.trendmicro.com

Item Code: SLEM26986/150615