



# 14.0 ScanMail™ for Microsoft™ Exchange

## Installation and Upgrade Guide

Securing your Exchange environment



Messaging Security

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<http://docs.trendmicro.com/en-us/enterprise/scanmail-for-microsoft-exchange.aspx>

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The user documentation for Trend Micro ScanMail *for Microsoft Exchange* 14.0 is intended to introduce the main features of the software and installation instructions for your production environment. You should read through it prior to installing or using the software.

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

Trend Micro is always seeking to improve its documentation. Your feedback is always welcome. Please evaluate this documentation on the following site:

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# Preface

## Preface

Welcome to the Trend Micro™ ScanMail™ *for Microsoft™ Exchange* Installation and Upgrade Guide. This book contains basic information about the tasks you need to perform to deploy ScanMail to protect your Exchange servers. It is intended for novice and advanced users of ScanMail who want to manage ScanMail .

This preface discusses the following topics:

- *ScanMail Documentation on page vi*
- *Audience on page vi*
- *Document Conventions on page vii*

## ScanMail Documentation

The product documentation consists of the following:

- **Online Help** : Web-based documentation that is accessible from the product console

The Online Help contains explanations about ScanMail features.

- **Installation and Upgrade Guide** : PDF documentation that discusses requirements and procedures for installing and upgrading the product
- **Administrator's Guide** : PDF documentation that discusses getting started information and product management
- **Readme File**: Contains late-breaking product information that might not be found in the other documentation. Topics include a description of features, installation tips, known issues, and product release history.
- **Knowledge Base**: Contains the latest information about all Trend Micro products. Other inquiries that were already answered are also posted and a dynamic list of the most frequently asked question is also displayed.

<http://esupport.trendmicro.com>



### Note

Trend Micro recommends checking the corresponding link from the Update Center ( <http://docs.trendmicro.com/en-us/enterprise/scanmail-for-microsoft-exchange.aspx>) for updates to the documentation.

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## Audience

The ScanMail documentation assumes a basic knowledge of security systems, including:

- Antivirus and content security protection

- Spam protection
- Network concepts (such as IP address, netmask, topology, LAN settings)
- Various network topologies
- Microsoft Exchange Server administration
- Microsoft Exchange Server 2019, 2016 and 2013 server role configurations
- Various message formats

## Document Conventions

The documentation uses the following conventions.

**TABLE 1. Document Conventions**

CONVENTION	DESCRIPTION
UPPER CASE	Acronyms, abbreviations, and names of certain commands and keys on the keyboard
<b>Bold</b>	Menus and menu commands, command buttons, tabs, and options
<i>Italics</i>	References to other documents
Monospace	Sample command lines, program code, web URLs, file names, and program output
<b>Navigation &gt; Path</b>	The navigation path to reach a particular screen For example, <b>File &gt; Save</b> means, click <b>File</b> and then click <b>Save</b> on the interface
 <b>Note</b>	Configuration notes

<b>CONVENTION</b>	<b>DESCRIPTION</b>
 <b>Tip</b>	Recommendations or suggestions
 <b>Important</b>	Information regarding required or default configuration settings and product limitations
 <b>WARNING!</b>	Critical actions and configuration options

# Chapter 1

## Planning ScanMail Installation and Upgrade

Install ScanMail locally or remotely to one or more servers using one easy-to-use Setup program.

Topics in this chapter:

- *System Requirements on page 1-2*
- *Conducting a Pilot Installation on page 1-7*
- *Deployment Strategy on page 1-9*
- *Preparing to Install on page 1-13*
- *Pre-installation Checklist on page 1-19*
- *About Fresh Installations on page 1-20*
- *About Upgrading to ScanMail 14.0 on page 1-21*
- *About Cluster Installations on page 1-21*

## System Requirements

The following lists the system requirements for running Trend Micro™ ScanMail™ for Microsoft™ Exchange .

### ScanMail with Exchange Server 2019

The following table lists the system requirements for running ScanMail with Exchange Server 2019.

**TABLE 1-1. System Requirements for Installation with Exchange Server 2019**

RESOURCE	REQUIREMENTS
Processor	<ul style="list-style-type: none"> <li>x64 architecture-based processor that supports Intel™64 architecture (formally known as Intel EM64T)</li> <li>x64 architecture-based computer with AMD™ 64-bit processor that supports AMD64 platform</li> </ul>
Memory	4GB RAM exclusively for ScanMail
Disk space	5GB free disk space At least 30GB during installation
Operating System	<p>Microsoft™ Windows Server™ 2022 Standard or Datacenter (64-bit)</p> <p>Microsoft™ Windows Server™ 2019 Standard or Datacenter (64-bit)</p> <hr/> <p> <b>Note</b> For ScanMail deployment on Server Core edition, Trend Micro recommends running installation package on Windows Server with Desktop Experience feature and deploy ScanMail remotely.</p> <hr/>
Mail Server	Microsoft Exchange Server 2019 or above
Web Server	<ul style="list-style-type: none"> <li>Microsoft Internet Information Services (IIS) 10.0</li> </ul>

RESOURCE	REQUIREMENTS
Browser	<ul style="list-style-type: none"> <li>• Microsoft™ Internet Explorer™ 7.0 or above</li> <li>• Mozilla Firefox™ 3.0 or above</li> </ul>
MSXML	4.0 Service Pack 2 or above
.NET framework	4.7.2 or 4.8

## ScanMail with Exchange Server 2016

The following table lists the system requirements for running ScanMail with Exchange Server 2016.

**TABLE 1-2. System Requirements for Installation with Exchange Server 2016**

RESOURCE	REQUIREMENTS
Processor	<ul style="list-style-type: none"> <li>• x64 architecture-based processor that supports Intel™64 architecture (formally known as Intel EM64T)</li> <li>• x64 architecture-based computer with AMD™ 64-bit processor that supports AMD64 platform</li> </ul>
Memory	1GB RAM exclusively for ScanMail (2GB RAM recommended)
Disk space	5GB free disk space

RESOURCE	REQUIREMENTS
Operating System	<ul style="list-style-type: none"> <li>• Microsoft™ Windows Server™ 2016 Standard or Datacenter (64-bit)</li> <li>• Microsoft™ Windows Server™ 2012 R2 Standard or Datacenter (64-bit)</li> </ul> <hr/> <div style="display: flex; align-items: center;">  <p><b>Important</b> You must also install Windows Server 2012 R2 Update (KB2919355 and KB2919442) with Microsoft™ Windows Server™ 2012 R2.</p> </div> <hr/> <ul style="list-style-type: none"> <li>• Microsoft™ Windows Server™ 2012 Standard or Datacenter (64-bit)</li> </ul>
Mail Server	Microsoft Exchange Server 2016 or above
Web Server	<ul style="list-style-type: none"> <li>• Microsoft Internet Information Services (IIS) 10.0</li> <li>• Microsoft Internet Information Services (IIS) 8.5</li> <li>• Microsoft Internet Information Services (IIS) 8.0</li> </ul>
Browser	<ul style="list-style-type: none"> <li>• Microsoft™ Internet Explorer™ 7.0 or above</li> <li>• Mozilla Firefox™ 3.0 or above</li> </ul>
MSXML	4.0 Service Pack 2 or above
.NET framework	4.5 or later

## ScanMail with Exchange Server 2013

The following table lists the system requirements for running ScanMail with Exchange Server 2013.

**TABLE 1-3. System Requirements for Installation with Exchange Server 2013**

RESOURCE	REQUIREMENTS
Processor	<ul style="list-style-type: none"> <li>• x64 architecture-based processor that supports Intel™64 architecture (formally known as Intel EM64T)</li> <li>• x64 architecture-based computer with AMD™ 64-bit processor that supports AMD64 platform</li> </ul>
Memory	1GB RAM exclusively for ScanMail (2GB RAM recommended)
Disk space	5GB free disk space
Operating System	<ul style="list-style-type: none"> <li>• Microsoft™ Windows Server™ 2012 R2 Standard or Datacenter (64-bit)</li> </ul> <hr/> <p> <b>Important</b> You must also install Windows Server 2012 R2 Update (KB2919355 and KB2919442) with Microsoft™ Windows Server™ 2012 R2.</p> <hr/> <ul style="list-style-type: none"> <li>• Microsoft™ Windows Server™ 2012 Standard or Datacenter (64-bit)</li> <li>• Microsoft™ Windows Server™ 2008 R2 Standard with Service Pack 1 or above (64-bit)</li> <li>• Microsoft™ Windows Server™ 2008 R2 Enterprise with Service Pack 1 or above (64-bit)</li> <li>• Microsoft™ Windows Server™ 2008 R2 Datacenter RTM with Service Pack 1 or above (64-bit)</li> </ul> <hr/> <p> <b>Note</b> Microsoft Windows Server 2008 R2 is not supported.</p> <hr/>
Mail Server	Microsoft Exchange Server 2013 SP1 or above

RESOURCE	REQUIREMENTS
Web Server	<ul style="list-style-type: none"><li>• Microsoft Internet Information Services (IIS) 8.5</li><li>• Microsoft Internet Information Services (IIS) 8.0</li><li>• Microsoft Internet Information Services (IIS) 7.5</li></ul>
Browser	<ul style="list-style-type: none"><li>• Microsoft™ Internet Explorer™ 7.0 or above</li><li>• Mozilla Firefox™ 3.0 or above</li></ul>
MSXML	4.0 Service Pack 2 or above
.NET framework	4.5 or later

## SQL Server Express Requirements

During an upgrade installation, ensure that you upgrade your current SQL Server Express version as follows before running the setup program:

- SQL Server Express 2005: Upgrade to SQL Server Express 2014 32-bit
- SQL Server Express 2008: Upgrade to SQL Server Express 2014 64-bit

## Cluster Installations

The following lists supported cluster environments:

- Exchange Server 2019 with Database Availability Group (DAG) model
- Exchange Server 2016 with Database Availability Group (DAG) model
- Exchange Server 2013 with Database Availability Group (DAG) model

## ScanMail Integration with Trend Micro Products

You can optionally integrate ScanMail with other Trend Micro products. The following table outlines the supported products and versions.

**TABLE 1-4. Integrated Trend Micro Product Support**

TREND MICRO PRODUCT	SUPPORTED VERSIONS
Trend Micro Apex Central™	<ul style="list-style-type: none"> <li>• 2019</li> </ul>
Smart Protection Server	<ul style="list-style-type: none"> <li>• 3.0 or above</li> <li>• OfficeScan Server Integrated Smart Protection Server</li> </ul>
Deep Discovery Advisor	<ul style="list-style-type: none"> <li>• 2.92 or later</li> </ul>
Deep Discovery Analyzer	<ul style="list-style-type: none"> <li>• 5.0 or later</li> <li>• 6.0 or later</li> </ul>

## Conducting a Pilot Installation

The following section contains Trend Micro recommendations for installing ScanMail . Read this section before you begin your installation.

Trend Micro recommends conducting a pilot deployment before performing a full-scale deployment. A pilot deployment provides an opportunity to gather feedback, determine how features work, and to discover the level of support likely needed after full deployment.

To conduct a pilot installation, refer to the following:

- [Step 1: Creating an Appropriate Test Site on page 1-7](#)
- [Step 2: Preparing a Rollback Plan on page 1-8](#)
- [Step 3: Executing and Evaluating Your Pilot Installation on page 1-9](#)

### Step 1: Creating an Appropriate Test Site

Create a test environment that matches your production environment as closely as possible. The test server and production servers should share:

- The same operating system, Exchange version, service packs, and patches

- The same Trend Micro and other third party software such as Trend Micro™ Apex Central™ , Trend Micro™ Apex One™ , and Trend Micro™ ServerProtect™
- The same type of topology that would serve as an adequate representation of your production environment



**Note**

Evaluation versions of most Trend Micro products are available for download from the Trend Micro website:

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

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## Step 2: Preparing a Rollback Plan

Trend Micro recommends creating a rollback recovery plan in case there are issues with the setup process. This process should take into account local corporate policies, as well as technical specifics.

### Backing Up ScanMail Configurations

Before making any changes, back up ScanMail configurations.

---

#### Procedure

1. Stop ScanMail Master Service and SQL Server (SCANMAIL) Service on the target server which has the database you want to backup.
  2. Copy the database files. You may have one of the following set of files, depending on your installation:
    - Conf.mdf , Log.mdf , and Report.mdf
    - ScanMail.mdf
-

## Restoring ScanMail Configurations

Use the following procedures to restore ScanMail configurations if necessary.

---

### Procedure

1. Stop the ScanMail Master Service and SQL Server (SCANMAIL) Service on the target server which you want to restore the configurations to.
  2. Delete Conf.mdf , Log.mdf , Report.mdf or ScanMail.mdf .
  3. Replace the Conf.mdf , Log.mdf , Report.mdf or ScanMail.mdf .
  4. Start SQL Server (SCANMAIL) Service and ScanMail Master Service.
- 

## Step 3: Executing and Evaluating Your Pilot Installation

Install and evaluate the pilot based on expectations regarding security enforcement and network performance. Create a list of successes and issues encountered throughout the pilot installation. Identify potential "pitfalls" and plan accordingly for a successful installation.

## Deployment Strategy

The ScanMail Setup program supports installation to a single or multiple local server or remote servers.

When deploying and configuring ScanMail on your LAN segments consider:

- The network traffic burden on your servers
- Whether your network uses multiple mail servers and/or a bridgehead server and back-end servers
- Whether your enterprise network contains more than one Local Area Network (LAN) segment

## Planning for Network Traffic

When planning for deployment, consider the network traffic and CPU load that ScanMail will generate.

ScanMail generates network traffic when it does the following:

- Connects to the Trend Micro ActiveUpdate server to check for and download updated components
- Sends alerts and notifications to administrators and other designated recipients

ScanMail increases the burden on the CPU when it scans email messages. ScanMail uses multi-threaded scanning which reduces the CPU burden.

## Deploying ScanMail to Multiple Servers

If your network has only one Exchange server, deploying ScanMail is a relatively simple task. Install ScanMail on the Exchange server and configure it to optimize your messaging security.

If your company has multiple Exchange servers, deploying ScanMail can be more complex. A popular strategy deploys one server as a front-end server just behind the gateway and the rest of the mail servers as back-end servers. Back-end servers are often installed to clusters to gain the benefit of failover recovery. If your company uses this model, consider the points in [Table 1-5: Deploying ScanMail with Exchange Server on page 1-11](#) when you deploy ScanMail .

Another strategy is to deploy ScanMail to an Exchange server in the network demilitarized zone (DMZ). This increases the risks to which the servers are exposed. When exposing Exchange servers to the Internet, SMTP traffic is a major concern. Trend Micro recommends enabling SMTP scanning when installing ScanMail on Exchange servers exposed to the Internet (this is the default value). ScanMail scans SMTP traffic during real-time scanning. Carefully consider your configurations and only depart from Trend Micro default configurations when you understand the consequences.

**TABLE 1-5. Deploying ScanMail with Exchange Server**

SERVER ROLE	RECOMMENDATION
<p>Edge Transport server:</p> <ul style="list-style-type: none"> <li>• No access to Active Directory</li> <li>• XML-based routing</li> <li>• Port 25 SMTP relay</li> <li>• Decentralized management</li> <li>• Information that defines configuration, connectors, recipients, SMTP settings and agent settings are files that are on the server and are updated to the Edge Transport server role periodically</li> <li>• Deploys in a standalone manner</li> <li>• There are two primary deployment servers for the Edge Transport server role: (1) In the organization's network perimeter, directly facing the Internet, (2) Behind a third-party mail server directly facing the Internet</li> </ul>	<ul style="list-style-type: none"> <li>• Set Edge Transport servers to perform real-time security risk scan.</li> <li>• Set Edge Transport servers to update through Trend Micro ActiveUpdate, and to regularly perform scheduled update for protection against new security risks.</li> <li>• Enable spam prevention features.</li> <li>• Enable web reputation features.</li> </ul>

SERVER ROLE	RECOMMENDATION
<p>Mailbox server 2013, 2016 and 2019:</p> <ul style="list-style-type: none"> <li>• All transport components, such as Categorizer, can be installed and configured on hardware that is separate from the Mailbox server roles or the Public Folder server role</li> <li>• Intra-organizational server role for mail transport in an organization and the Internet</li> <li>• Centralized management</li> <li>• Has direct access to Active Directory</li> <li>• Handles all authentications</li> <li>• All routing is based on Active Directory</li> <li>• Uses Port 25 SMTP relay and message relay</li> <li>• Can be load balanced</li> <li>• Located within the local network, behind the network perimeter and shielded from the Internet</li> <li>• Hosts mailbox databases</li> <li>• Delivers and stores email messages to client mailboxes on the Information Store</li> </ul>	<ul style="list-style-type: none"> <li>• Set the servers to perform real-time security risk scan.</li> <li>• If there is an Edge server, set this server to use the Edge server as the source of updates. Otherwise set the Trend Micro ActiveUpdate server as the source.</li> <li>• Enable Active Directory integrated Attachment Blocking rules and Content Filtering policies.</li> <li>• Regularly perform scheduled scans on Exchange mailboxes to prevent security risks from creeping in from unexpected sources not covered in your configurations.</li> </ul>

## Deploying ScanMail to Multiple Local Area Network (LAN) Segments

Large enterprises might have multiple Exchange servers on different LAN segments separated by the Internet. In these cases, Trend Micro recommends installing ScanMail on each LAN segment separately.

**Note**

ScanMail for Microsoft Exchange is designed to guard your Exchange mail servers. ScanMail does not provide protection to non-Exchange mail servers, file servers, desktops, or gateway devices. ScanMail protection is enhanced when used together with other Trend Micro products such as Trend Micro Appex One™ to protect your file servers and desktops, and Trend Micro InterScan VirusWall™ or InterScan™ Messaging Security Suite to protect your network perimeter.

## Preparing to Install

To prepare for a smooth installation, preview the information in this section and consult the pre-installation checklist. The installation process is the same for all supported Windows server versions.

For complete protection, Trend Micro recommends that you install one copy of Trend Micro ScanMail on each of your Microsoft Exchange servers. In ScanMail , you can perform local and remote installations from one Setup program. The local machine is the one on which the Setup program runs and the remote machines are all other machines to which it installs ScanMail . You can simultaneously install ScanMail on multiple servers. The only requirements are that you integrate these servers into your network and access them using an account with administrator privileges.

The following table displays the minimum privileges required for a ScanMail fresh installation.

**TABLE 1-6. Fresh Installation Minimum Privileges**

EXCHANGE ROLE	MINIMUM PRIVILEGES
Exchange Server 2013/2016/2019 (Mailbox Server Roles)	Local Administrator and Domain User Exchange Organization Management group
Exchange Server 2013/2016/2019 (Edge Transport Server Roles)	Local Administrator

## Configuration Exceptions When You Upgrade

When you upgrade from ScanMail 12.5 with Service Pack 1 to ScanMail 14.0 , the Setup program uses your previous settings during installation. However, certain settings are not directly copied to ScanMail 14.0 .

**TABLE 1-7. Configuration Exception Settings**

SETTING	DESCRIPTION
Activation Code	When you perform an upgrade, ScanMail always uses the new activation code. If a new activation code is not submitted, the original activation code is used.
Web Server	ScanMail always uses new web server settings. Update web server settings to use a new web server with HTTP service. The previous version of IIS site with HTTP service is discontinued.

## Installing without Internet Information Services

ScanMail does not require the installation of Internet Information Services (IIS) on your server. If you do not require the ScanMail management console on your server, you can install ScanMail without the normal IIS requirement.

---

### Procedure

1. Run `cmd.exe`.
  2. Navigate to the `Smex` folder and type the following after the command prompt:  

```
setup /skipwebconsole
```
  3. Setup continues to the **Welcome** screen and the installation process proceeds like a normal install. ScanMail does not check for IIS and does not install the management console on this server.
-

## Installing with a Remote SQL Server

ScanMail supports storing the ScanMail database on a remote SQL server with fresh installs on supported versions of Exchange Server. Prepare a remote SQL server before installing ScanMail .



### Note

ScanMail cannot automatically detect the remote SQL server. Manually configure the remote SQL server settings during installation. If the settings are not configured during installation, ScanMail installs the database on the local SQL Server Express.

---

### Procedure

1. Prepare a remote SQL server.
  2. Create an account for installing the ScanMail database on the SQL server.
    - If you plan to create a new database for ScanMail, create an account with the **dbcreator** role in the SQL instance where you want to install the database.
    - If you plan to use an existing database for ScanMail, create an account with the **db\_owner** role for the existing database.
- 



### Note

ScanMail supports both SQL server accounts and Windows accounts. If you use a Windows account, the account requires the following privileges:

- Local Administrator
- Exchange ApplicationImpersonation role
- Exchange Organization Management group

To activate EUQ during installation, you must enable the domain administrator privileges for the user account. You can disable the domain administrator privileges for the account after completing the installation.

---

3. Complete the rest of the installation process.
- 

## Additional Requirements for Installing Remotely with Windows 2008 and 2012

This only applies to Windows Server 2008 R2 SP1, Windows Server 2012, and Windows Server 2012 R2 operating systems when remotely installing multiple Exchange servers.

Prepare the following:

- An account with the following privileges:
  - For Exchange Server 2013 / 2016 / 2019 Mailbox:
    - Local Administrator
    - Domain User
    - Exchange Organization Management Group
  - Exchange Server 2013 / 2016 / 2019 Edge Transport:
    - Local Administrator



**Note**

If it is an account with domain user privileges, this account must have local administrator privileges on each Exchange server.

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- Enable file sharing on Windows Firewall or disable Windows Firewall on each Exchange server.
- 



**Note**

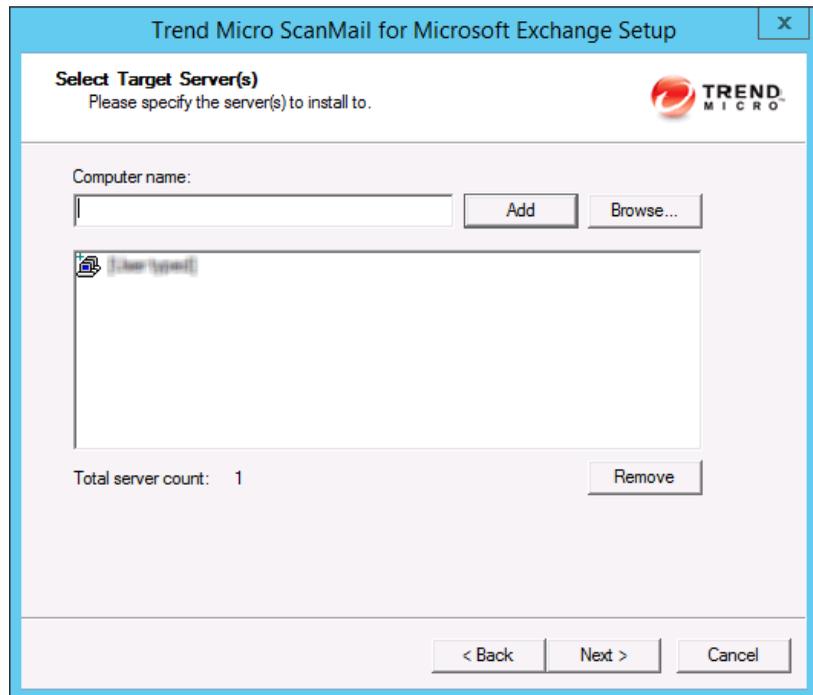
Trend Micro strongly recommends reverting to the original settings after completing the installation.

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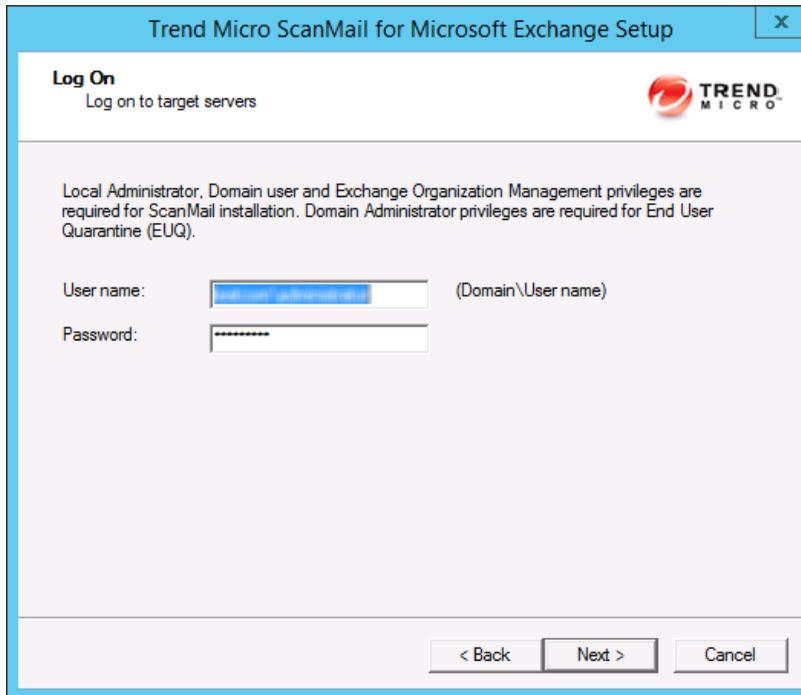
- Ensure that administrative shares are available on each Exchange server.

## Procedure

1. Log on to the operating system with an account that has domain administrator privileges and launch the ScanMail Setup program.
2. Specify the options on the following screens:
  - a. On the **Select Target Server(s)** screen of the installation process, **Add** or **Browse** to add multiple target ScanMail servers that belong to the same domain.

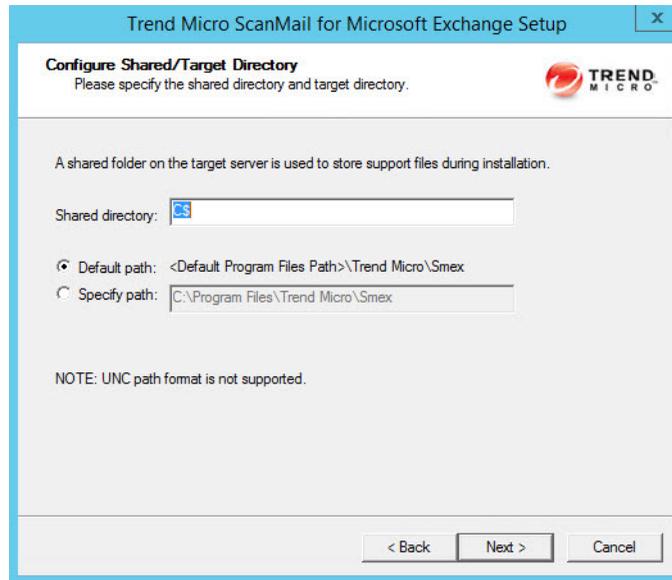


- b. On the **Log On** screen of the installation process, type the same account that was used to log on to the operating system in Step 1.



The screenshot shows a Windows-style dialog box titled "Trend Micro ScanMail for Microsoft Exchange Setup". The dialog has a blue header bar with the title and a close button (X). Below the header, the text "Log On" is displayed in bold, followed by "Log on to target servers". The Trend Micro logo is in the top right corner. The main area contains a paragraph of instructions: "Local Administrator, Domain user and Exchange Organization Management privileges are required for ScanMail installation. Domain Administrator privileges are required for End User Quarantine (EUQ).". Below this, there are two input fields: "User name:" with a text box containing "admin\user" and "(Domain\User name)" to its right, and "Password:" with a masked text box. At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

- c. On the **Configure Shared/Target Directory** screen of the installation process, type the administrative shares such as ADMIN \$, C\$, and D\$.



3. Complete the rest of the installation process.

## Pre-installation Checklist

The following table outlines important items to note before proceeding with a ScanMail installation.

**TABLE 1-8. Pre-installation Checklist**

ITEM	NOTES
Minimum account privileges	<ul style="list-style-type: none"> <li>• For Exchange Mailbox you need Local Administrator and Exchange Organization Management Group privileges. However, you need to activate End User Quarantine later with an account with Domain Administrator privileges</li> <li>• For Exchange Server Edge Transport you need Local Administrator privileges.</li> </ul>

ITEM	NOTES
Restart	You do not need to stop Exchange services before installing or restart them after a successful installation.
Registration Key and Activation Code	During installation, the Setup program prompts you to type an Activation Code. You can use the Registration Key that came with ScanMail to obtain an Activation Code online from the Trend Micro website. The Setup program provides a link to the Trend Micro website. If you do not activate your product during registration, you can do so at a later time from the product console. However, until you activate ScanMail, ScanMail will only provide a limited service.
Proxy server	During installation, the Setup program prompts you to specify proxy information. If a proxy server handles Internet traffic on your network, you must type the proxy server information, your user name, and your password to receive pattern file and scan engine updates. If you leave the proxy information blank during installation, you can configure it at a later time from the product console.
CGI component	On Windows Server 2008, 2012, and 2012 R2, install CGI role service before installing ScanMail . Add CGI role service from <b>Windows Server Manager &gt; Add Roles &gt; Web Server (IIS) &gt; Add Role services &gt; Application development &gt; CGI</b> .
SQL Server Express	During an upgrade installation, ensure that you upgrade your current SQL Server Express version to 2014 or later.

## About Fresh Installations

Perform a fresh installation to install ScanMail for the first time. Before beginning your installation, consult the pre-installation checklist ([Pre-installation Checklist on page 1-19](#)).



### Note

The installation procedure is the same for all supported Windows versions.

## About Upgrading to ScanMail 14.0

Before beginning your installation, consult the pre-installation checklist ([Table 1-8: Pre-installation Checklist on page 1-19](#)). To upgrade ScanMail, run the Setup program.

ScanMail 14.0 supports upgrading from ScanMail 12.5 with Service Pack 1.

When upgrading, if ScanMail 14.0 has configuration settings similar to the previous version, then the upgraded version maintains these customized configurations. However, when there is no equivalent configuration setting, ScanMail installs and uses the Trend Micro default configurations.

### Upgrade Effect on Logs and Folders

Upgrading to this version of ScanMail has the following effects on logs and folders:

- Logs are retained and can be queried in the upgraded version.



#### Tip

Before upgrading, check the size of your log files. If the log file is very large, Trend Micro recommends that you run maintenance using your current version before you upgrade. This will greatly reduce the amount of time required for upgrade.

- The quarantine and backup folders are retained during upgrading.

## About Cluster Installations

### Cluster Installation for Exchange Server 2013, 2016, and 2019

Installing ScanMail on Exchange 2013, 2016, or 2019 clusters with DAG is the same as installing on a normal server. ScanMail does not automatically install on all the DAG nodes. ScanMail will only install on the nodes that you

configure on the **Select Target Servers** screen. Manually add all the nodes of the DAG cluster to the target server on the **Select Target Server** screen during installation.

## Chapter 2

# Installing ScanMail with Exchange Server 2013 / 2016 / 2019

Install ScanMail locally or remotely to one or more servers using one easy-to-use Setup program.

Topics in this chapter:

- *Privileges Requirements on page 2-2*
- *Installing with Exchange Server 2019 / 2016 / 2013 on page 2-4*

## Privileges Requirements

The following table displays the privileges required for installing ScanMail on Exchange 2013/2016/2019 with mailbox role.

**TABLE 2-1. Privileges Required for Installing ScanMail on Exchange 2013/2016/2019 with Mailbox Role**

<b>SCANMAIL DATABASE OPTION</b>	<b>SETUP ACCOUNT PRIVILEGES</b>	<b>DATABASE ACCESS ACCOUNT PRIVILEGES</b>
Local database	<ul style="list-style-type: none"><li>• Local Administrator</li><li>• Domain User</li><li>• Exchange Organization Management group</li></ul> <p>Activate End User Quarantine setup account should be the Domain Administrator account.</p>	N/A

<b>SCANMAIL DATABASE OPTION</b>	<b>SETUP ACCOUNT PRIVILEGES</b>	<b>DATABASE ACCESS ACCOUNT PRIVILEGES</b>
Remote SQL Server with SQL Windows Authentication	<ul style="list-style-type: none"> <li>• Local Administrator</li> <li>• Domain User</li> <li>• Exchange Organization Management Group</li> </ul> <p>Activate End User Quarantine setup account should be promoted as Domain Administrator temporarily during installation.</p>	<ul style="list-style-type: none"> <li>• Database privilege:               <ul style="list-style-type: none"> <li>• If you choose to create a new database for ScanMail: dbcreator role</li> <li>• If you choose to use an existing database for ScanMail: db_owner role</li> </ul> </li> <li>• Other privileges:               <ul style="list-style-type: none"> <li>• Local Admin</li> <li>• Exchange Organization Management Group</li> <li>• Exchange Application Impersonation role</li> </ul> </li> </ul> <p>Activate End User Quarantine database access account should be promoted as Domain Administrator temporarily during installation.</p>
Remote SQL Server with SQL Server Authentication	<ul style="list-style-type: none"> <li>• Local Administrator</li> <li>• Domain User</li> <li>• Exchange Organization Management Group</li> </ul> <p>Activate End User Quarantine setup account should be the Domain Administrator.</p>	<ul style="list-style-type: none"> <li>• If you choose to create a new database for ScanMail: dbcreator role</li> <li>• If you choose to use an existing database for ScanMail: db_owner role</li> </ul>



**Note**

If you use Remote SQL Server with SQL Windows Authentication option, it is a best practice to use the same domain account for Setup Account and Database Access Account.

If you use Local database option or Remote SQL Server with SQL Server Authentication option, ScanMail automatically adds the Exchange Application Impersonation role to the Exchange Servers group during installation.

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## Installing with Exchange Server 2019 / 2016 / 2013

The following lists the steps to install ScanMail with Exchange Server 2019/2016/2013 Mailbox and Edge Servers.

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**Note**

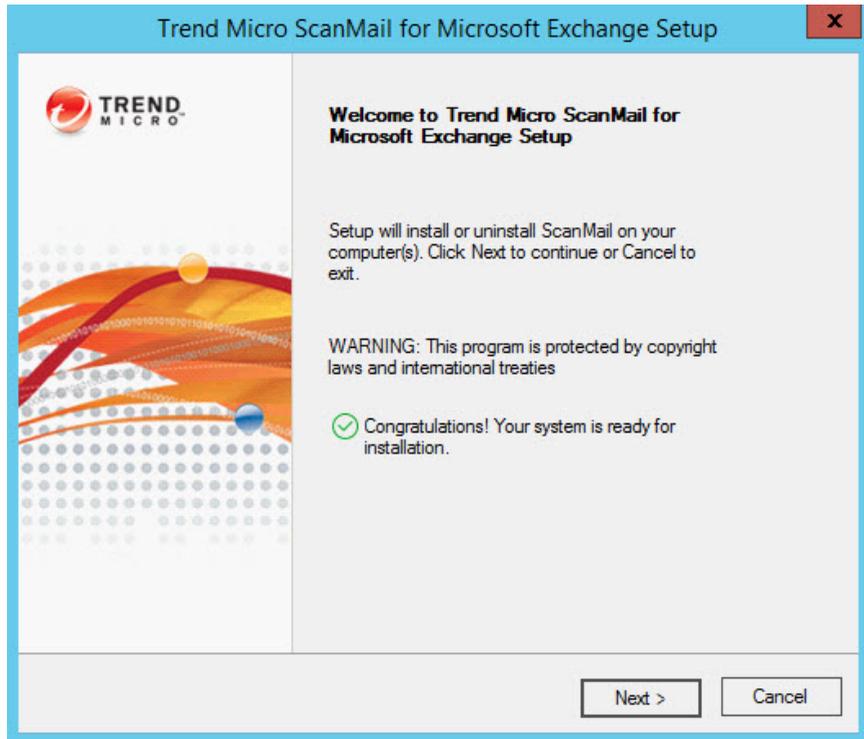
This procedure is specifically written for Exchange 2016 servers. However, this procedure applies to Exchange 2013 and 2019 servers as well.

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### Procedure

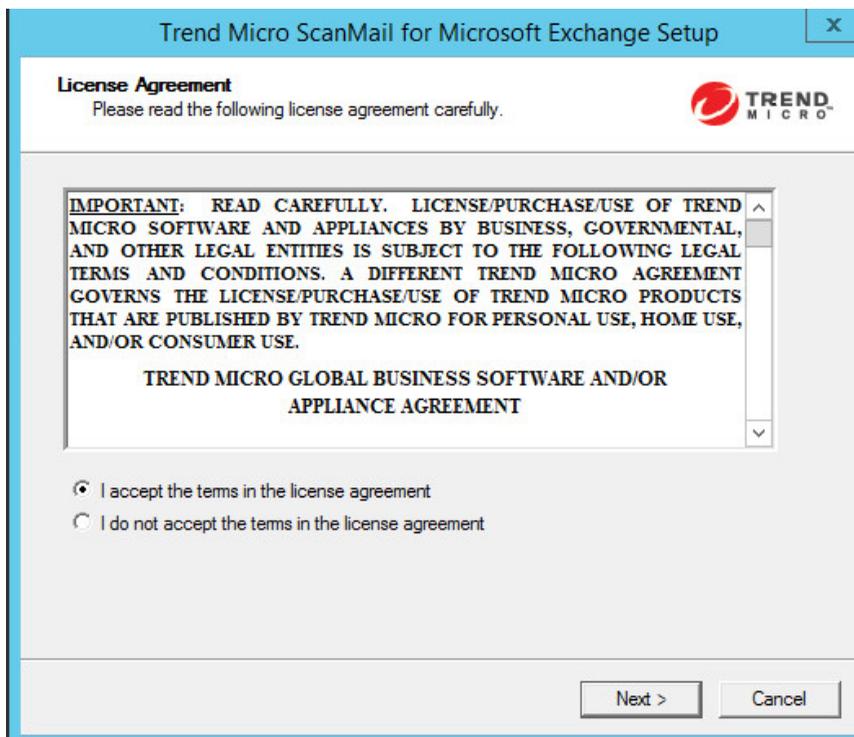
1. Obtain the Setup program:
  - a. Download ScanMail from the Trend Micro website.
  - b. Unzip the file to a temporary directory.
  - c. Run `setup.exe` to install ScanMail.

The **Welcome to Trend Micro ScanMail for Microsoft Exchange Setup** screen appears.



2. Click **Next** to continue the installation.

The **License Agreement** screen appears.

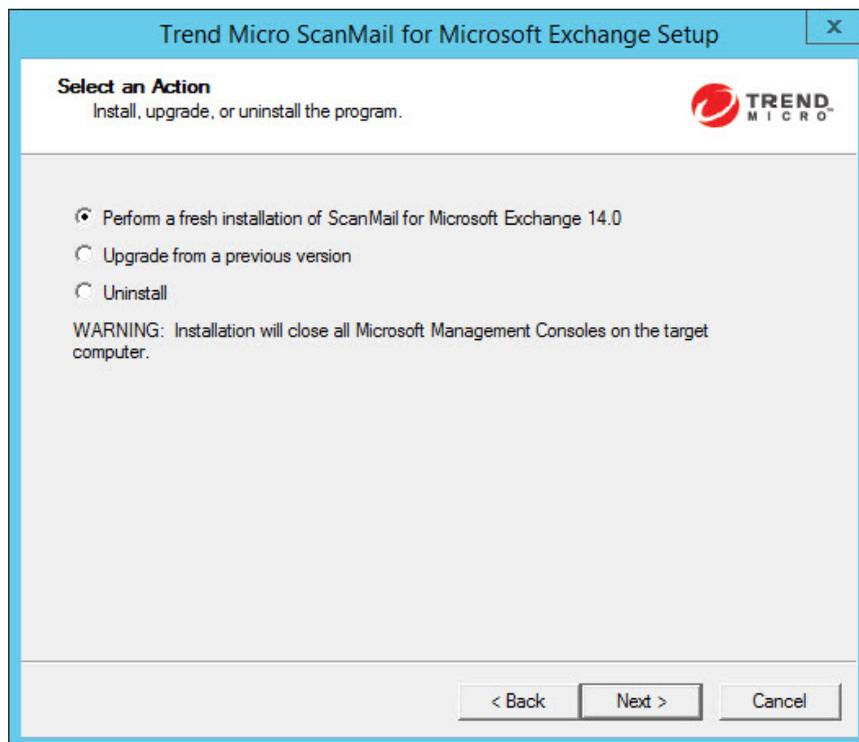


3. Click **I accept the terms in the license agreement** to agree to the terms of the agreement and continue installation. Click **Next** to continue.

**Note**

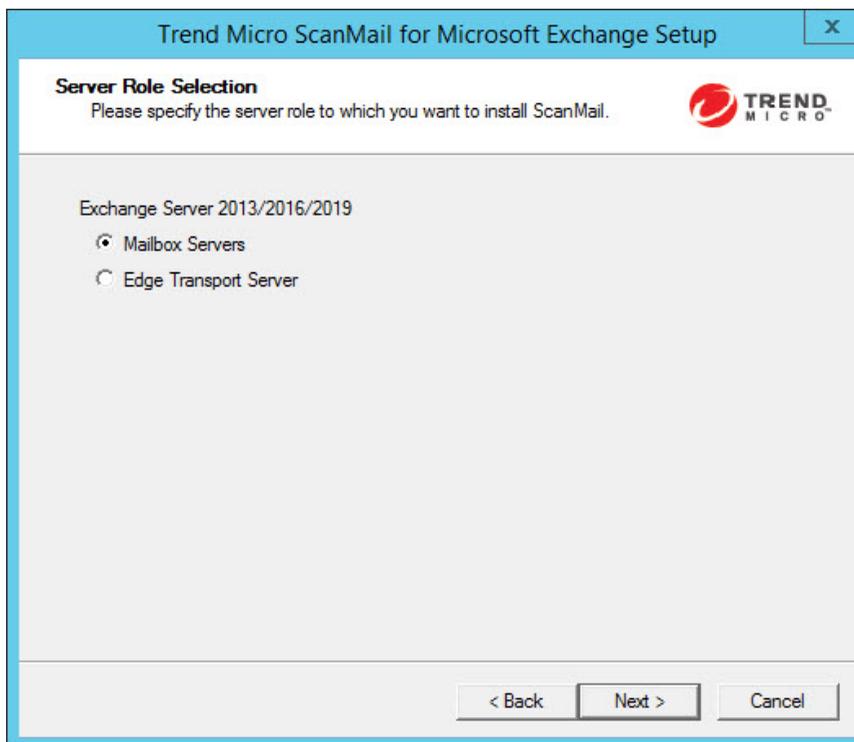
If you do not accept the terms, click **I do not accept the terms in the license agreement**. This terminates the installation without modifying your operating system.

The **Select an Action** screen appears.



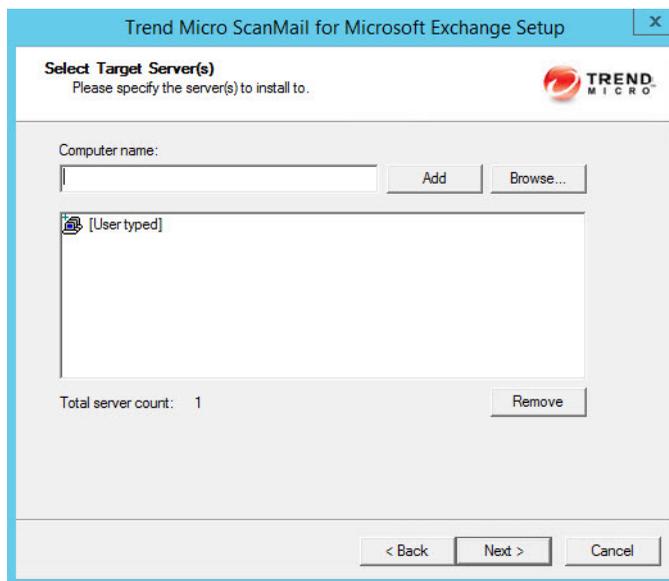
4. Select an action.
  - a. Select **Perform a fresh installation of ScanMail for Microsoft Exchange 14.0** to perform a fresh install.
  - b. Select **Upgrade from a previous version** to upgrade an existing version of ScanMail. For more information about upgrading, see [About Upgrading to ScanMail 14.0 on page 1-21](#).
  - c. Click **Next** to continue.

The **Server Version Selection** screen appears.



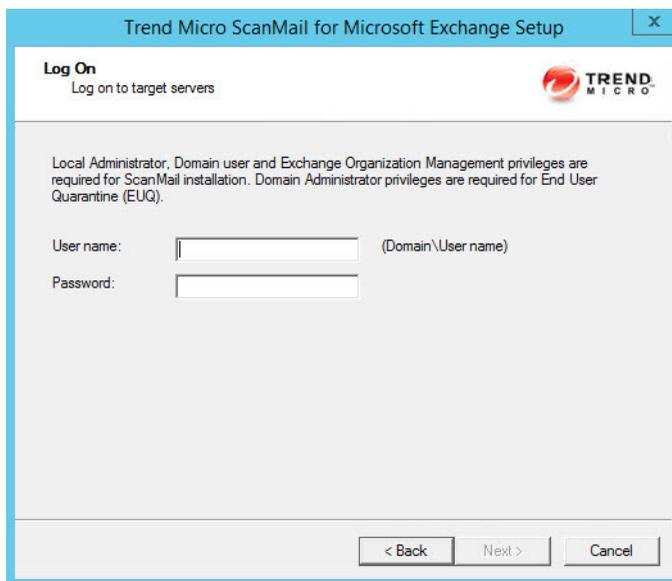
5. Select the type of **Exchange Server 2013 / 2016 / 2019** you want to install ScanMail on ( **Mailbox Servers** or **Edge Transport Server** ) and click **Next** to continue.

The **Select Target Server(s)** screen appears.



6. Select the computers to which you want to install ScanMail.
  - a. Perform one of the following:
    - Type the name of the server to which you want to install in the **Computer name** field and click **Add** to add the computers to the list of servers.
    - Click **Browse** and browse the computers that are available on your network, then double-click the domain or computers you want to add to the list.
    - Click **Remove** to remove a server from the list.
  - b. Click **Next** to save your list of target servers and continue the installation.

The **Log On** screen appears.



The screenshot shows a window titled "Trend Micro ScanMail for Microsoft Exchange Setup" with a close button (X) in the top right corner. The window contains a "Log On" section with the subtext "Log on to target servers" and the Trend Micro logo. Below this, a message states: "Local Administrator, Domain user and Exchange Organization Management privileges are required for ScanMail installation. Domain Administrator privileges are required for End User Quarantine (EUQ)." There are two input fields: "User name:" with a text box and "(Domain\User name)" to its right, and "Password:" with a text box. At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

---

 **Note**

The Setup program can install ScanMail to a number of single servers or to all the computers in a domain. Use an account with the appropriate privileges to access every target server. This version of ScanMail supports IPv6.

- 
7. Log on to the target servers where you want to install ScanMail. Type the user name and password to log on to the target server to install ScanMail. Click **Next** to continue.

**Note**

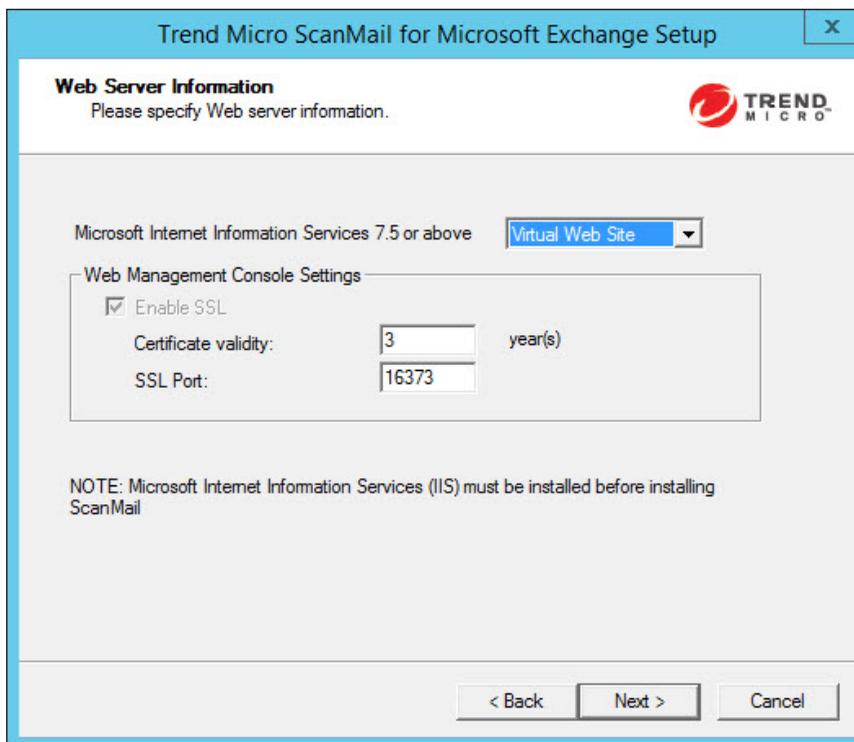
Depending on the Exchange server role, ScanMail requires the following privileges:

- Mailbox Server: Local Administrator, Domain end user and Exchange Organization Management
- Edge Transport Server: Local Administrator

The **Configure Shared/Target Directory** screen appears.

8. Type the directory share name for which the specified user has access rights or keep the default temporary share directory, C\$. The Setup program uses the shared directory to copy temporary files during installation and is only accessible to the administrator. Select **Default path** or **Specify path** and type the directory path on the target server where you will install ScanMail. Click **Next** to continue.

The **Web Server Information** screen appears.



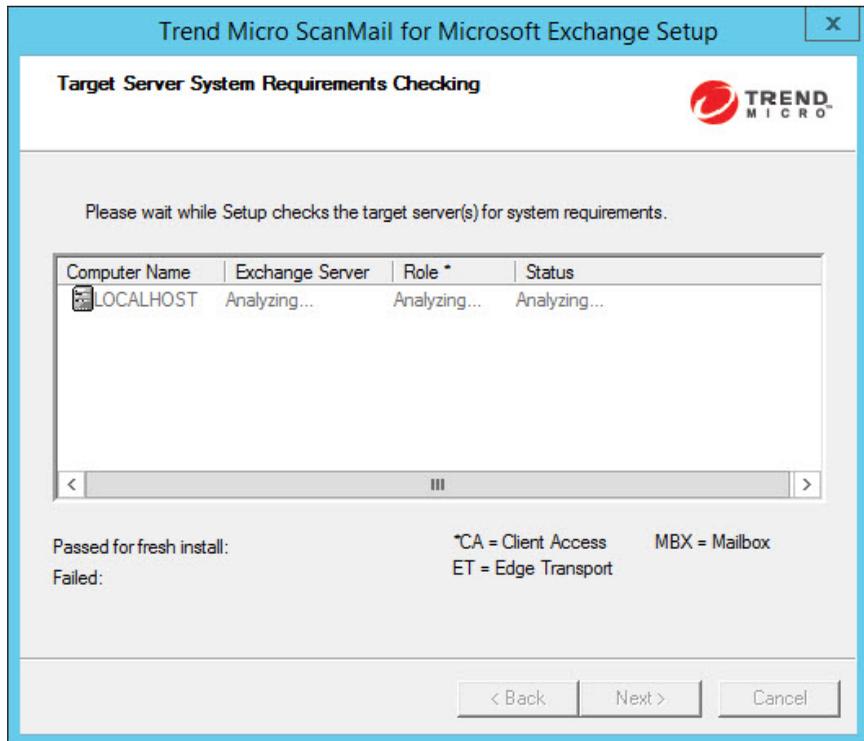
The screenshot shows a window titled "Trend Micro ScanMail for Microsoft Exchange Setup" with a close button (X) in the top right corner. The main heading is "Web Server Information" with the instruction "Please specify Web server information." and the Trend Micro logo. Below this, there is a label "Microsoft Internet Information Services 7.5 or above" and a dropdown menu currently set to "Virtual Web Site". A section titled "Web Management Console Settings" contains a checked checkbox for "Enable SSL". Underneath, there are two input fields: "Certificate validity:" with the value "3" and the unit "year(s)", and "SSL Port:" with the value "16373". A note at the bottom states: "NOTE: Microsoft Internet Information Services (IIS) must be installed before installing ScanMail". At the bottom of the window are three buttons: "< Back", "Next >", and "Cancel".

9. Select **Default Web Site** for IIS or **Virtual Web Site**. Next to **Port number** type the port to use as a listening port for this server. Click **Next** to continue.

**Note**

The SSL for Web Management Console cannot be disabled.

The **Target Server System Requirements Checking** screen appears.



**10.** Review the settings. Click **Next**.

The **SQL Configuration** screen appears.

The screenshot shows the 'SQL Configuration' dialog box. It has a title bar 'Trend Micro ScanMail for Microsoft Exchange Setup'. The main content area is titled 'SQL Configuration' and 'Configure SQL settings'. The Trend Micro logo is in the top right. There are two radio button options: 'Install SQL Server 2014 Express' (selected) and 'Specify an existing SQL server'. The 'Specify an existing SQL server' option has several input fields: 'SQL server data source', 'Authentication' (a dropdown menu showing 'Windows Authentication'), 'User name' (with a placeholder '(Domain\User name)'), 'Password', and 'Database selection'. Under 'Database selection', there are two radio buttons: 'Create database for ScanMail server' (selected) and 'Use existing database for ScanMail server'. Below the second radio button is a 'Database name' input field. At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'.

**11.** Select one of the following:

- Select **Install SQL Server 2014 Express** to install SQL Server 2014 Express on the local computer.
- Select **Specify an existing SQL server** to use an existing database server. Specify the SQL server data source, authentication method, user name, password, and database selection.

Make sure you type the user name and password of the account you have created for installing the ScanMail database and select the database type based on the account. For details, see Step 2 in [Installing with a Remote SQL Server on page 1-15](#).

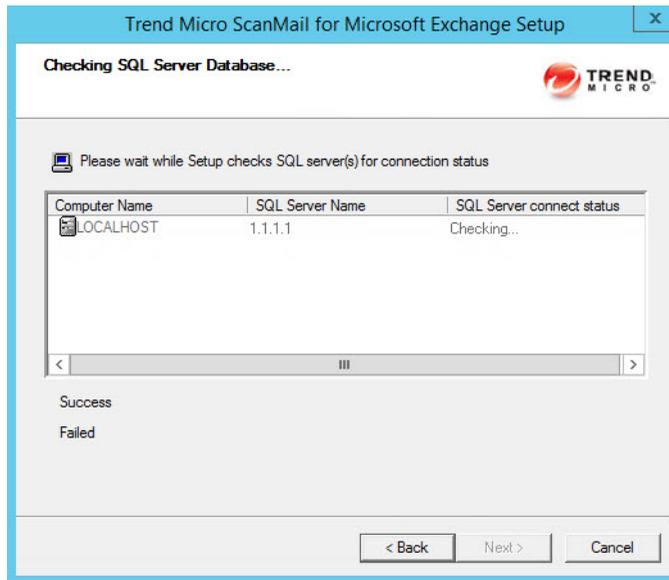


**Note**

Using a centralized SQL server for ScanMail data storage increases the risk of a single point of failure and reduction in performance. Ensure that steps are taken for a high availability remote SQL server.

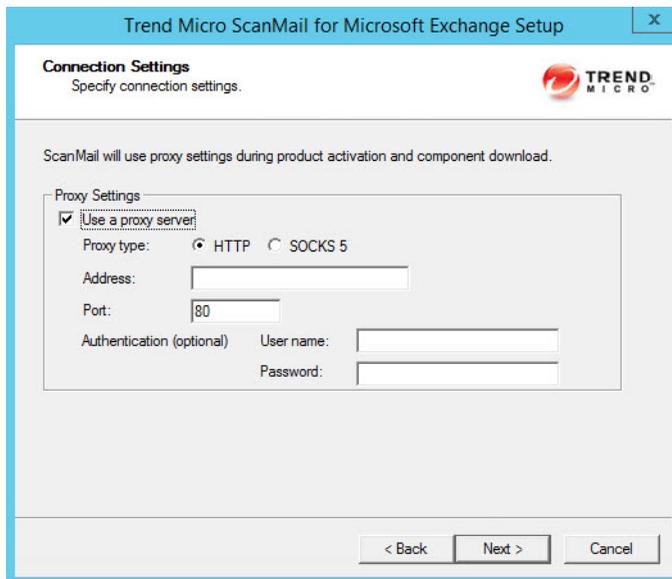
12. Click **Next**.

The **Checking SQL Server Database** screen appears.



13. Click **Next** to continue.

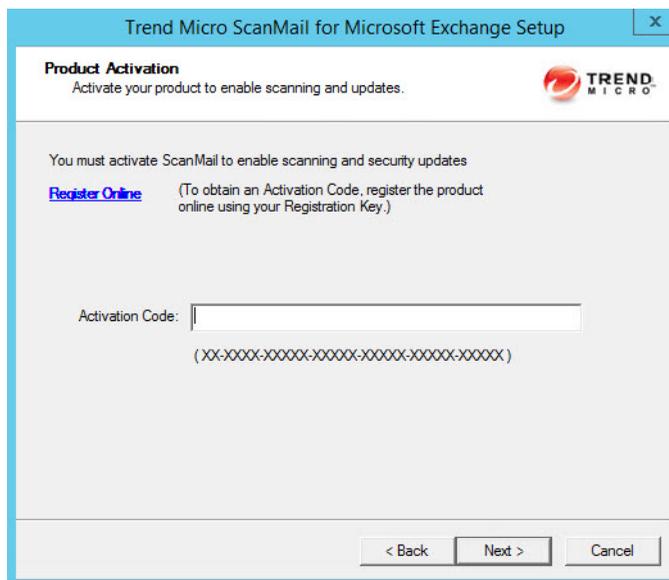
The **Connection Settings** screen appears.



The screenshot shows the 'Connection Settings' dialog box for Trend Micro ScanMail for Microsoft Exchange Setup. The dialog has a title bar with the text 'Trend Micro ScanMail for Microsoft Exchange Setup' and a close button. Below the title bar, the text 'Connection Settings' is displayed, followed by the instruction 'Specify connection settings.' and the Trend Micro logo. A note states: 'ScanMail will use proxy settings during product activation and component download.' The main area is titled 'Proxy Settings' and contains a checked checkbox labeled 'Use a proxy server'. Below this, there are radio buttons for 'Proxy type' with 'HTTP' selected and 'SOCKS 5' unselected. There are input fields for 'Address:', 'Port:' (with '80' entered), 'Authentication (optional) User name:', and 'Password:'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

14. If a proxy server handles Internet traffic on your network, select **Use a proxy server** and then type the proxy hostname or address and port number that your proxy uses. By default, the proxy server is disabled. If you want to use SOCKS 5 for secure communication behind the proxy, select **SOCKS 5**. If your proxy requires authentication, type the user name and password used for authentication. Click **Next** to continue.

The **Product Activation** screen appears.



15. Type the activation code.



**Note**

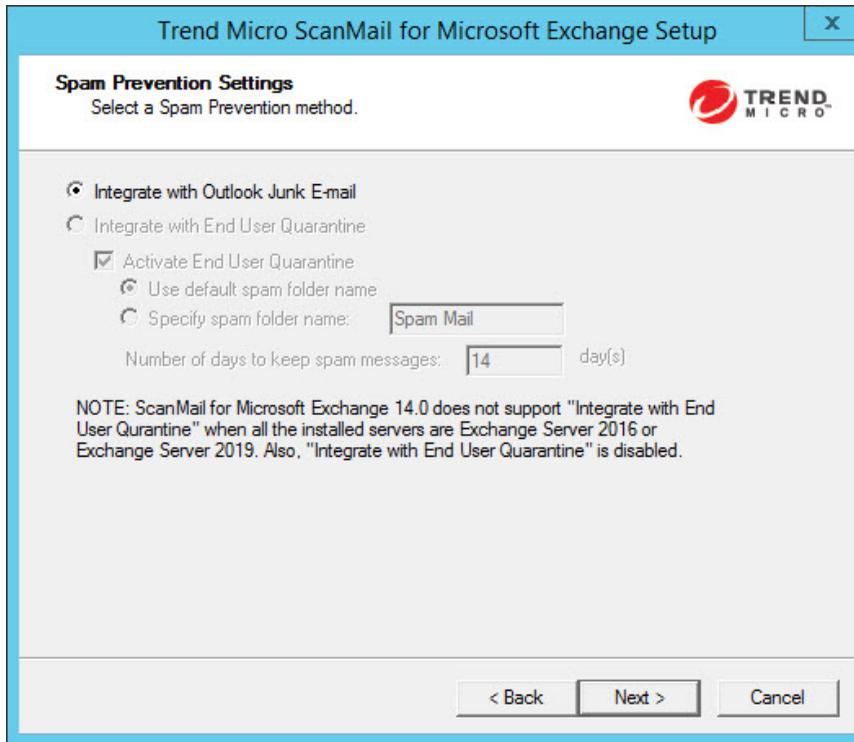
You can copy an Activation Code and paste it in the input field of the Activation Code on this screen.

16. Click **Next**.

- During a fresh installation, the **Spam Prevention Settings** screen appears.

17. Read the statement and click **Yes** to enroll. If you decline to participate, you can still proceed with the installation. Click **Next** to continue.

18. For upgrade installations, skip to step 17. On the **Spam Prevention Settings** screen, perform the following tasks:



The screenshot shows a window titled "Trend Micro ScanMail for Microsoft Exchange Setup" with a close button (X) in the top right corner. The main heading is "Spam Prevention Settings" with the instruction "Select a Spam Prevention method." and the Trend Micro logo on the right. There are two radio button options: "Integrate with Outlook Junk E-mail" (selected) and "Integrate with End User Quarantine". Under the "Integrate with End User Quarantine" option, there is a checked checkbox for "Activate End User Quarantine". Below this, there are two radio button options: "Use default spam folder name" (selected) and "Specify spam folder name:". The "Specify spam folder name:" option has a text input field containing "Spam Mail". Below these options, there is a label "Number of days to keep spam messages:" followed by a text input field containing "14" and the unit "day(s)". A note at the bottom states: "NOTE: ScanMail for Microsoft Exchange 14.0 does not support 'Integrate with End User Quarantine' when all the installed servers are Exchange Server 2016 or Exchange Server 2019. Also, 'Integrate with End User Quarantine' is disabled." At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel".

- a. Select one of the following folder options for storing ScanMail detected spam messages:

**Tip**

Trend Micro recommends that administrators who want to use the End User Quarantine feature activate the feature during installation. Trend Micro does not recommend using End User Quarantine in the following environments:

- The Exchange Mailbox server role is installed on a domain controller
  - The Exchange Client Access server role is installed on a domain controller (even if the Mailbox server role is installed on a member server)
- 

- Select **Integrate with Outlook Junk E-mail** to send all ScanMail detected spam messages to the Junk E-mail folder in Outlook.
  - Select **Integrate with End User Quarantine** to create a ScanMail Spam Folder in Outlook.
- 

**Important**

End User Quarantine is not supported on Exchange Server 2016 and 2019.

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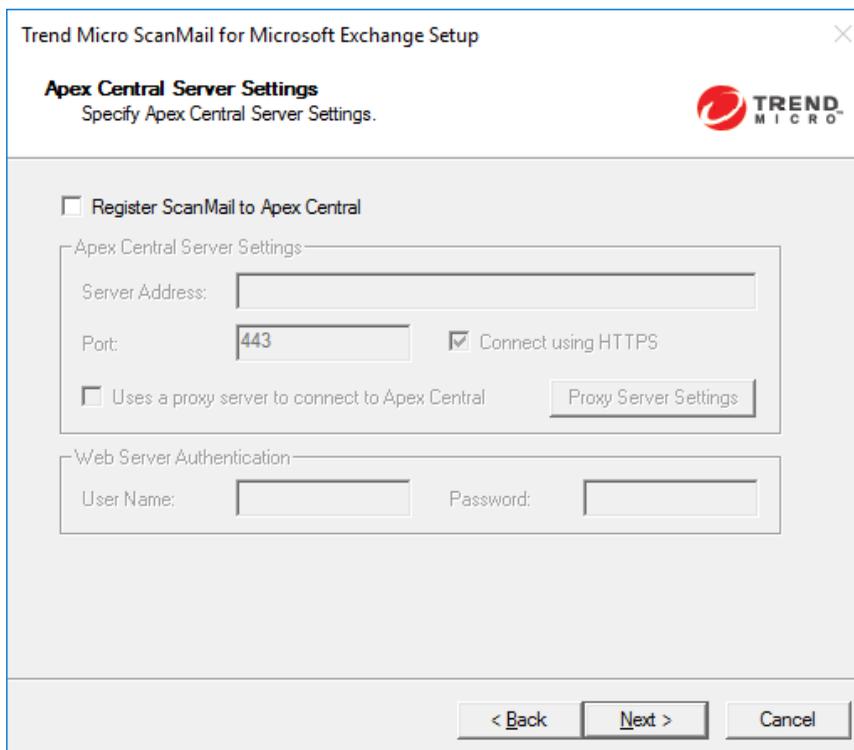
- Select **Activate End User Quarantine** to create the spam folder during the installation process.
  - Select to use the default spam folder name or specify a new name for the spam folder.
  - Specify the **Number of days to keep spam messages**.
- b. Click **Next** to continue.
- 

**Note**

End User Quarantine (EUQ) is not supported with Microsoft Outlook on Exchange Mailbox Server or Combo Server roles.

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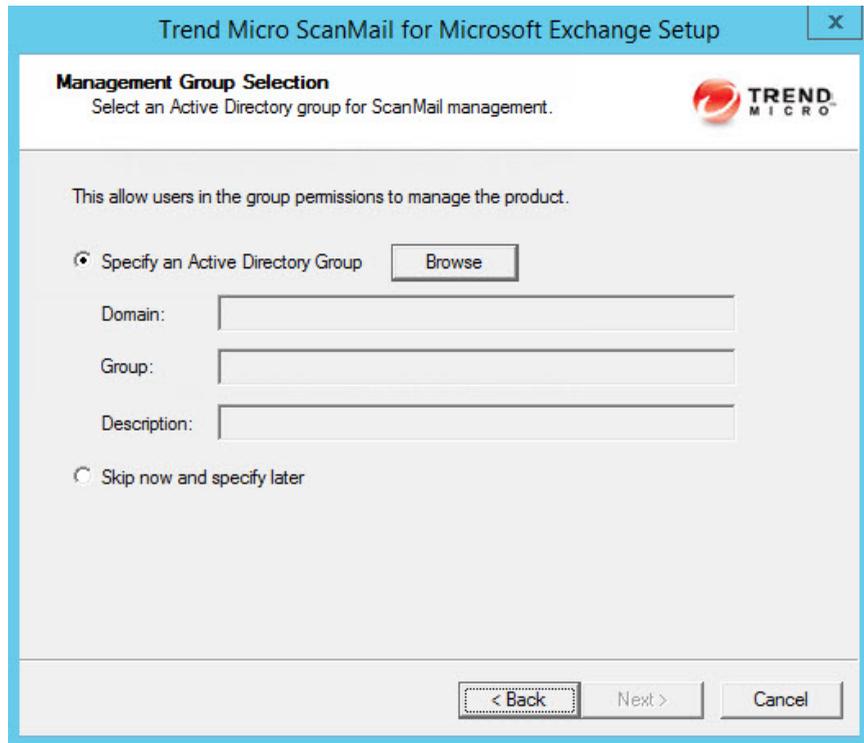
The **Apex Central Server Settings** screen appears.



The screenshot shows a dialog box titled "Trend Micro ScanMail for Microsoft Exchange Setup" with a close button (X) in the top right corner. Below the title bar, the text "Apex Central Server Settings" is displayed in bold, followed by "Specify Apex Central Server Settings." and the Trend Micro logo. The main content area contains a checkbox labeled "Register ScanMail to Apex Central" which is unchecked. Below this is a section titled "Apex Central Server Settings" with a collapsed arrow on the left. It contains a "Server Address:" text box, a "Port:" text box with "443" entered, and a checked checkbox "Connect using HTTPS". Below these is another unchecked checkbox "Uses a proxy server to connect to Apex Central" and a "Proxy Server Settings" button. A second section titled "Web Server Authentication" with a collapsed arrow on the left contains "User Name:" and "Password:" text boxes. At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

19. Specify the Apex Central server settings and specify the proxy server settings if you use a proxy server between your ScanMail server and Apex Central server. Click **Next** to continue.

The **Management Group Selection** screen appears.

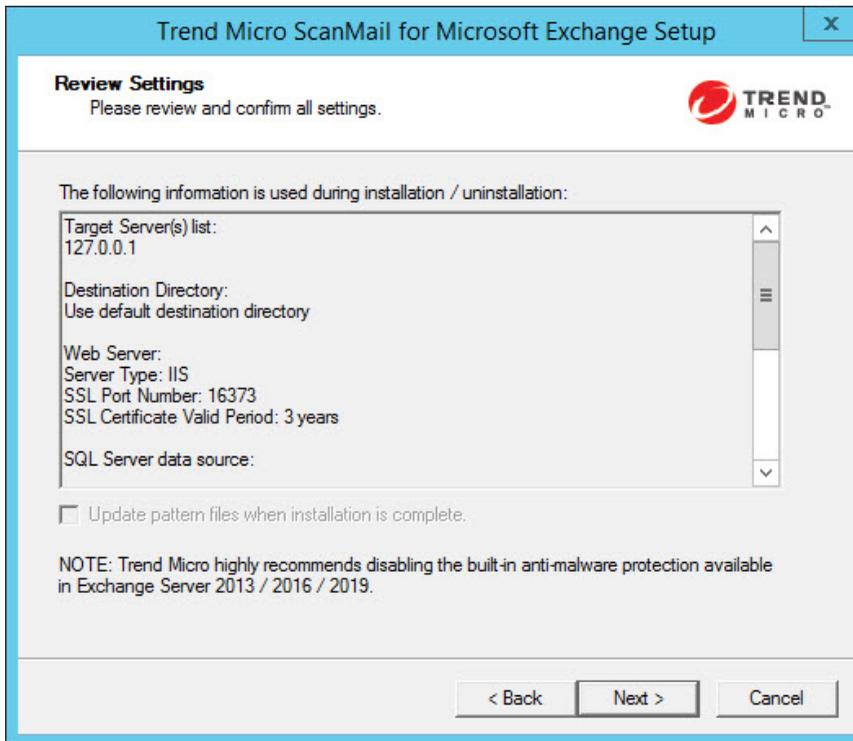


The screenshot shows a window titled "Trend Micro ScanMail for Microsoft Exchange Setup" with a close button (X) in the top right corner. The main heading is "Management Group Selection" with the instruction "Select an Active Directory group for ScanMail management." and the Trend Micro logo. Below this, it says "This allow users in the group permissions to manage the product." There are two radio button options: "Specify an Active Directory Group" (which is selected) and "Skip now and specify later". The "Specify an Active Directory Group" option includes a "Browse" button and three text input fields labeled "Domain:", "Group:", and "Description:". At the bottom right, there are three buttons: "< Back", "Next >", and "Cancel".

**20.** On the **Management Group Selection** screen:

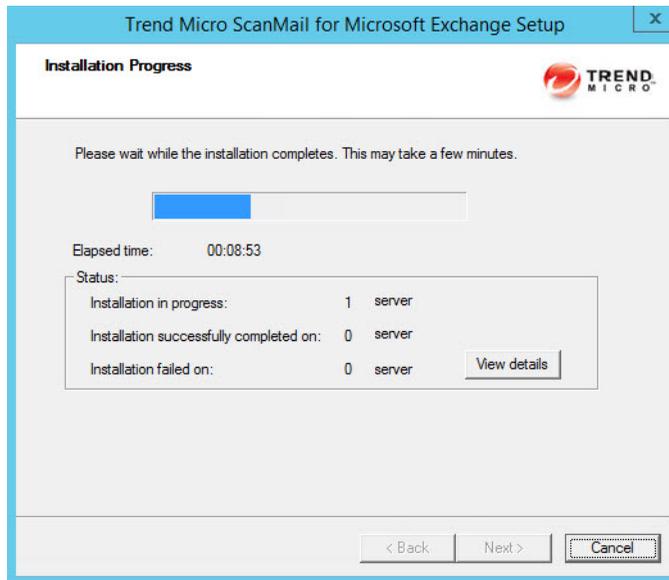
- a. Configure an Active Directory Group to have ScanMail management privileges by:
  - Clicking **Specify an Active Directory Group**.
  - Selecting **Skip now and specify later** to configure this feature after installation.
- b. Click **Next** to continue.

The **Review Settings** screen appears.



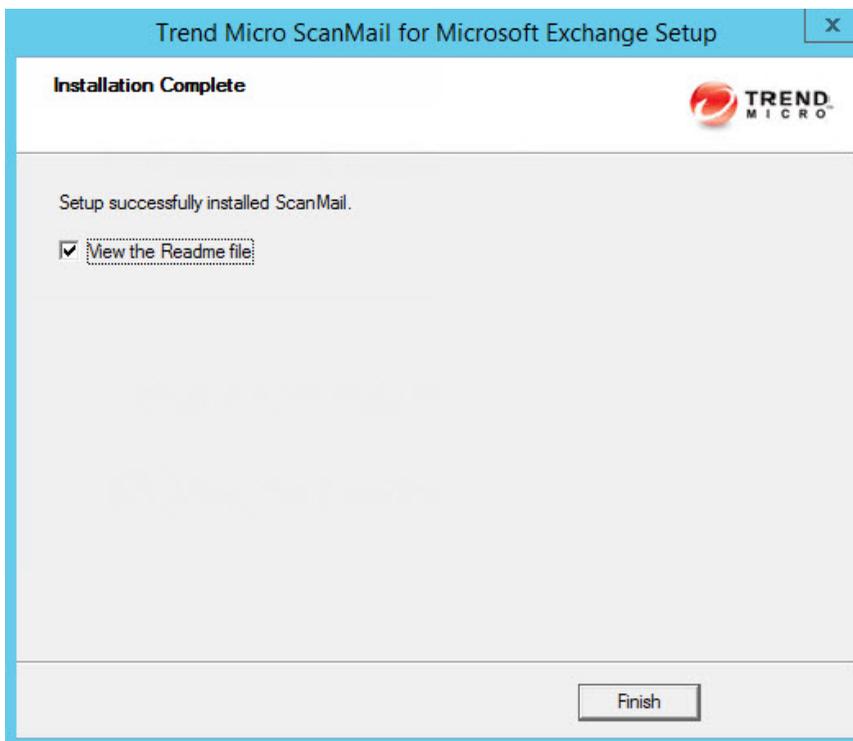
21. Review your settings and select the **Update pattern files when installation is complete** check box if you want to update pattern files immediately after installation. Click **Next** to continue.

The **Installation Progress** screen appears.



22. Click **View details** to display a list of each computer to which you are installing ScanMail and the status of each computer. Click **Next** when the installation completes.

The **Installation Complete** screen appears.



- 23.** This screen informs you that the installation was successful. Click **Finish** to exit the Setup program and the Readme file displays.
-

## Chapter 3

# Upgrading ScanMail with Exchange 2013 / 2016 Servers

Install ScanMail locally or remotely to one or more servers using one easy-to-use Setup program.

Topics in this chapter:

- *Supported Exchange Platforms for ScanMail Upgrade on page 3-2*
- *Upgrading ScanMail on Exchange 2013/2016 Servers on page 3-2*

## Supported Exchange Platforms for ScanMail Upgrade

The following table shows the supported Exchange platforms for ScanMail upgrade.

**TABLE 3-1. Supported Exchange Platforms for ScanMail Upgrade**

PLATFORMS	UPGRADE FROM
Exchange Server 2016 or later	ScanMail 12.5 Service Pack 1 or later
Exchange Server 2013 Service Pack 1 or later	ScanMail 12.5 Service Pack 1 or later

## Upgrading ScanMail on Exchange 2013/2016 Servers

The following lists the steps to install ScanMail with Exchange Server 2013/2016.



**Note**

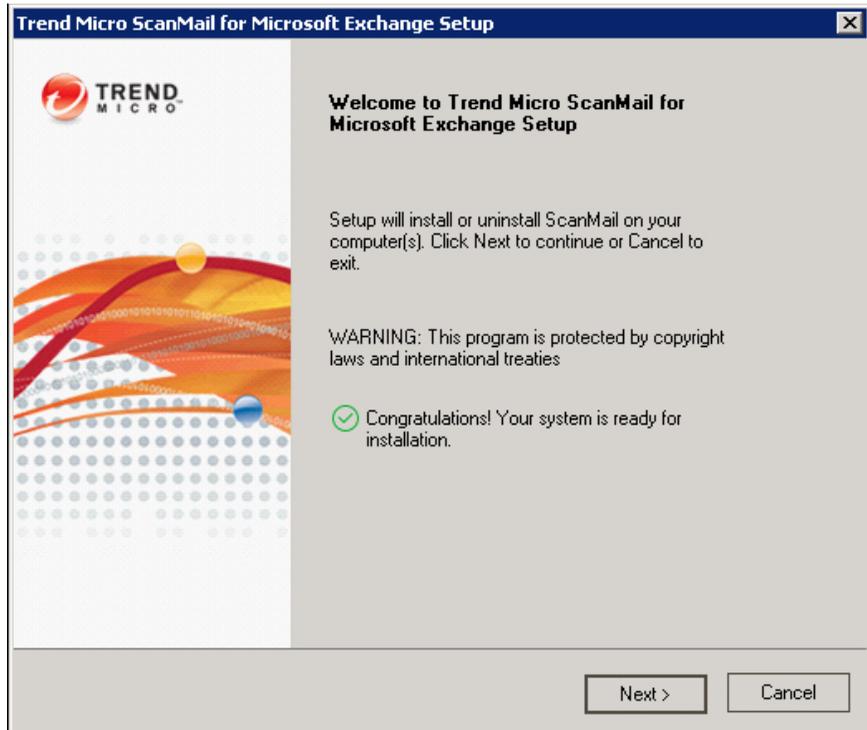
This procedure is specifically written for Exchange 2013 servers. However, this procedure applies to Exchange 2016 servers as well.

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### Procedure

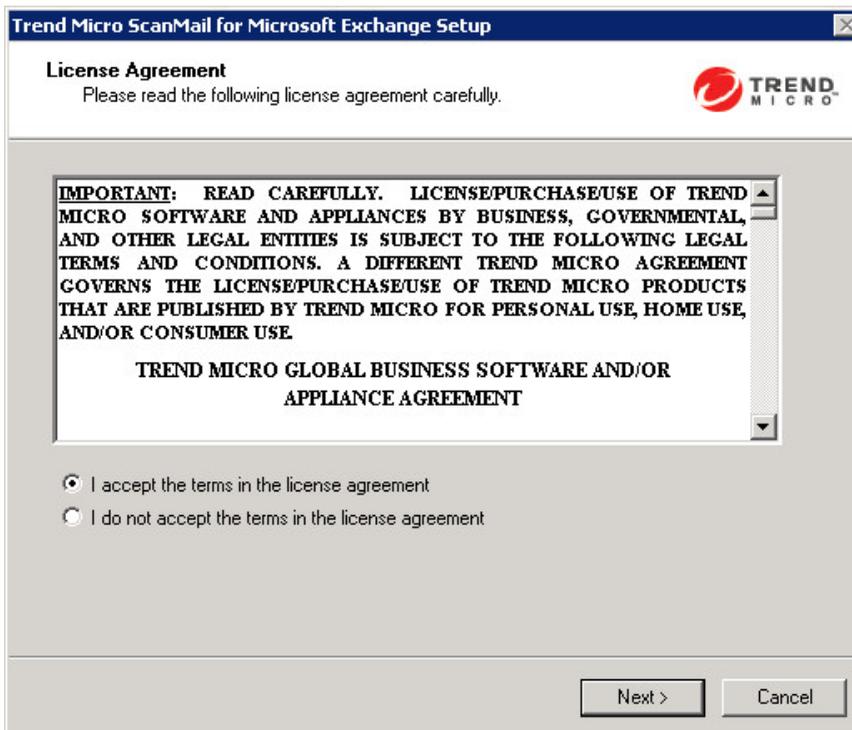
1. Obtain the Setup program:
  - a. Download ScanMail from the Trend Micro website.
  - b. Unzip the file to a temporary directory.
  - c. Run `setup.exe` to install ScanMail.

The **Welcome to Trend Micro ScanMail for Microsoft Exchange Setup** screen appears.



2. Click **Next** to continue the installation.

The **License Agreement** screen appears.

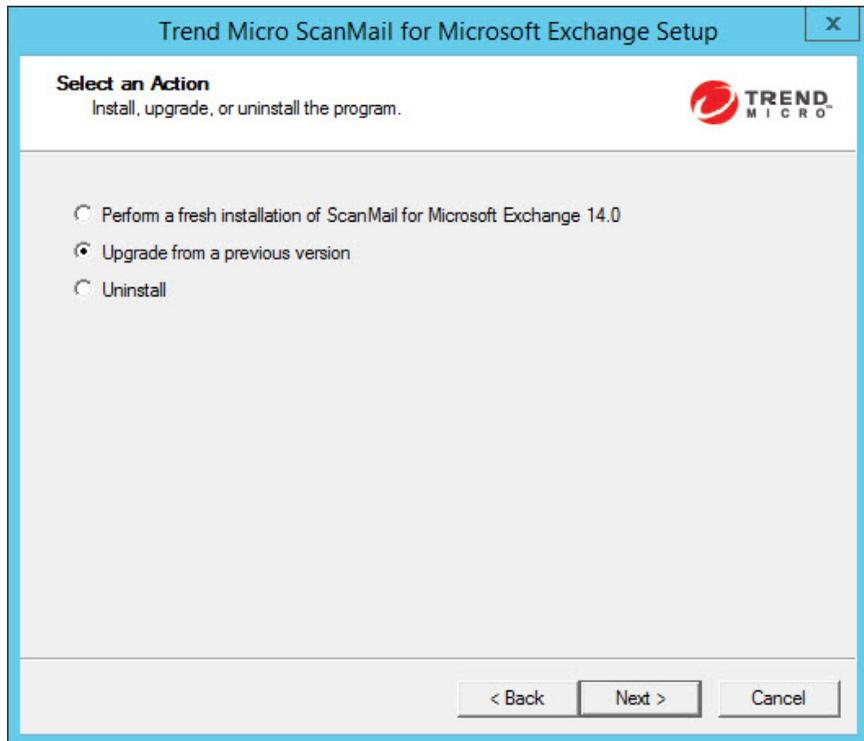


3. Click **I accept the terms in the license agreement** to agree to the terms of the agreement and continue installation. Click **Next** to continue.



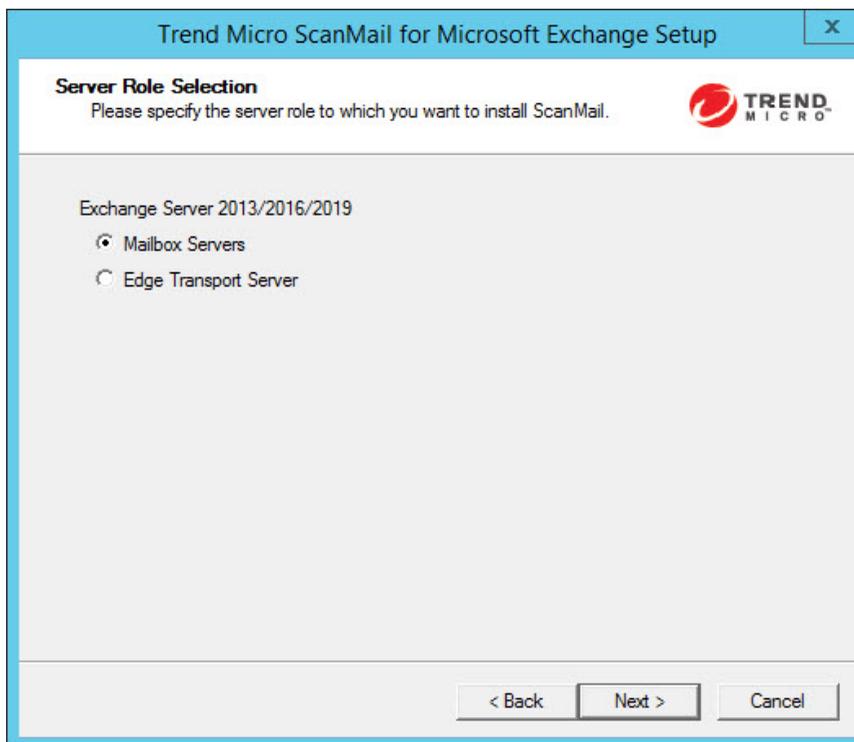
If you do not accept the terms, click **I do not accept the terms in the license agreement**. This terminates the installation without modifying your operating system.

The **Select an Action** screen appears.



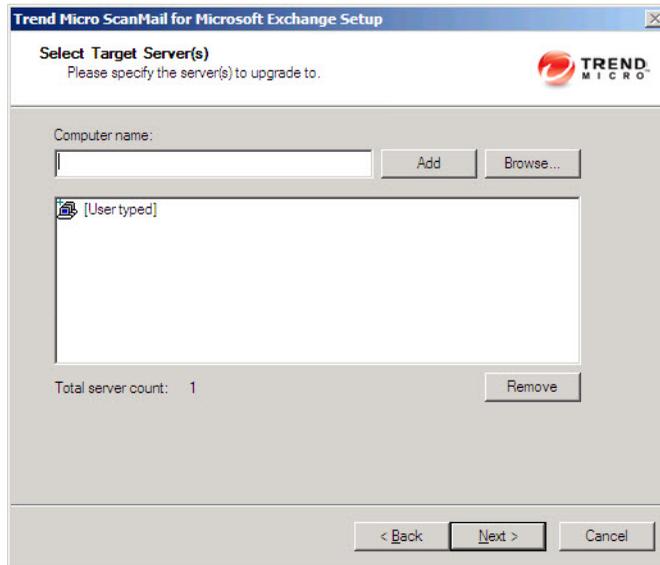
4. Select an action.
  - a. Select **Upgrade from a previous version** to upgrade an existing version of ScanMail . For more information about upgrading, see [About Upgrading to ScanMail 14.0 on page 1-21](#) .
  - b. Click **Next** to continue.

The **Server Version Selection** screen appears.



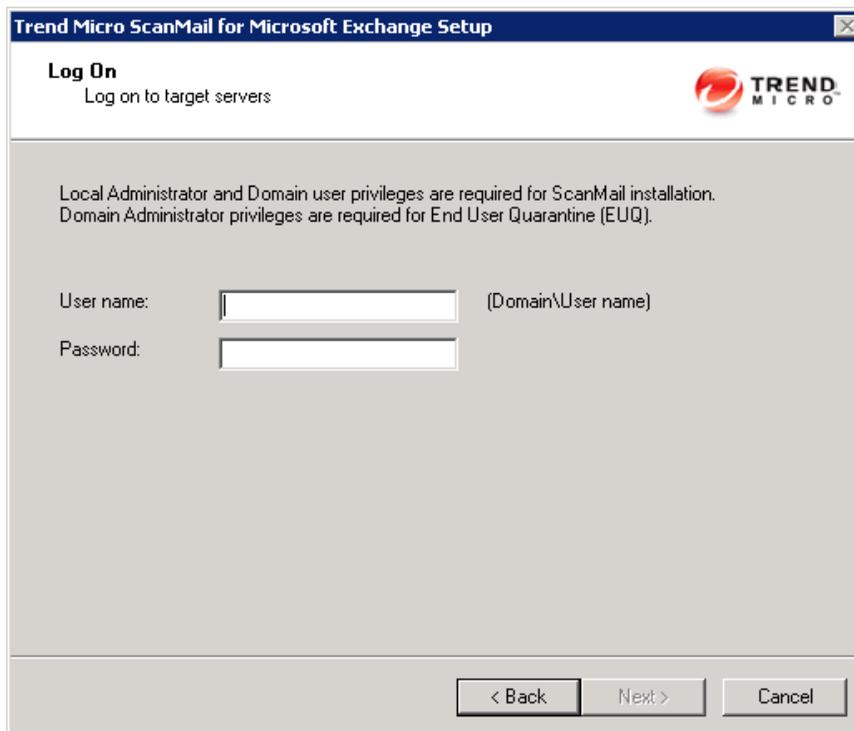
5. Select **Mailbox Servers** or **Edge Transport Server** to upgrade ScanMail . Click **Next** to continue.

The **Select Target Server(s)** screen appears.



6. Select the computers to which you want to install ScanMail .
  - a. Perform one of the following:
    - Type the name of the server to which you want to install in the **Computer name** field and click **Add** to add the computers to the list of servers.
    - Click **Browse** and browse the computers that are available on your network, then double-click the domain or computers you want to add to the list.
    - Click **Remove** to remove a server from the list.
  - b. Click **Next** to save your list of target servers and continue the installation.

The **Log On** screen appears.



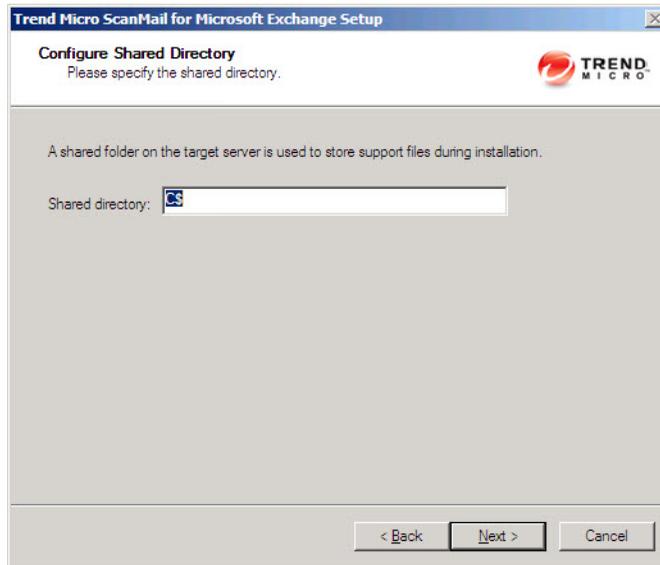
The screenshot shows a window titled "Trend Micro ScanMail for Microsoft Exchange Setup" with a close button in the top right corner. The window has a blue header bar. Below the header, the text "Log On" is displayed in bold, followed by "Log on to target servers" in a smaller font. The Trend Micro logo is in the top right corner. The main area of the window contains the following text: "Local Administrator and Domain user privileges are required for ScanMail installation. Domain Administrator privileges are required for End User Quarantine (EUQ)." Below this text are two input fields: "User name:" followed by a text box and "(Domain\User name)" to its right, and "Password:" followed by a text box. At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel".

 **Note**

The Setup program can install ScanMail to a number of single servers or to all the computers in a domain. Use an account with the appropriate privileges to access every target server. This version of ScanMail supports IPv6.

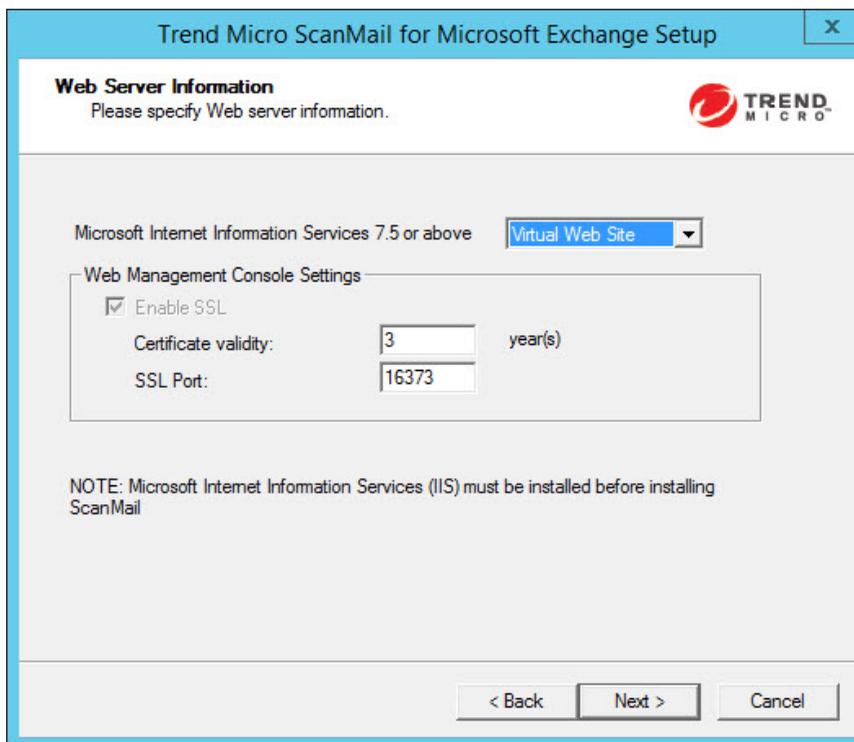
7. Log on to the target servers where you want to install ScanMail . Use an account with Exchange Organization Administrator privileges and Local Administrator privileges for the Mailbox server. Type the user name and password to log on to the target server to install ScanMail . Click **Next** to continue.

The **Configure Shared/Target Directory** screen appears.



8. Type the directory share name for which the specified user has access rights or keep the default temporary share directory, C\$. The Setup program uses the shared directory to copy temporary files during installation and is only accessible to the administrator. Select **Default path** or **Specify path** and type the directory path on the target server where you will install ScanMail . Click **Next** to continue.

The **Web Server Information** screen appears.



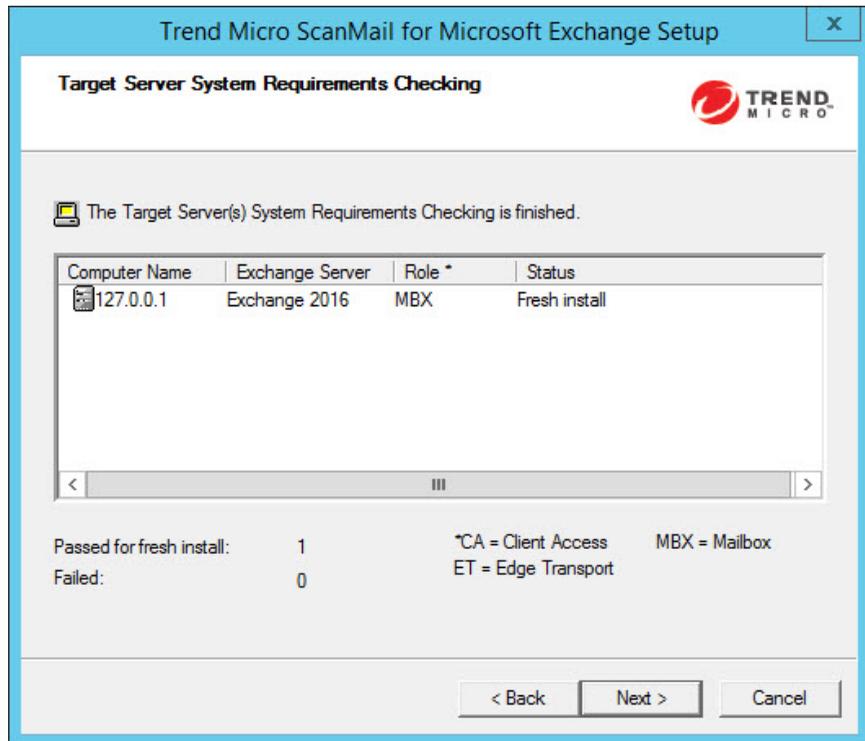
The screenshot shows the 'Web Server Information' dialog box in the Trend Micro ScanMail for Microsoft Exchange Setup. The dialog has a title bar with the text 'Trend Micro ScanMail for Microsoft Exchange Setup' and a close button. Below the title bar, the text 'Web Server Information' is displayed, followed by the instruction 'Please specify Web server information.' and the Trend Micro logo. The main area contains a dropdown menu for 'Microsoft Internet Information Services 7.5 or above' with 'Virtual Web Site' selected. Below this is a section titled 'Web Management Console Settings' which includes a checked checkbox for 'Enable SSL', a 'Certificate validity' field set to '3' with the unit 'year(s)', and an 'SSL Port' field set to '16373'. At the bottom of the dialog, there are three buttons: '< Back', 'Next >', and 'Cancel'. A note at the bottom of the dialog reads: 'NOTE: Microsoft Internet Information Services (IIS) must be installed before installing ScanMail'.

9. Select **Default Web Site** for IIS or **Virtual Web Site**. Next to **Port number** type the port to use as a listening port for this server. Click **Next** to continue.

**Note**

The SSL for Web Management Console cannot be disabled.

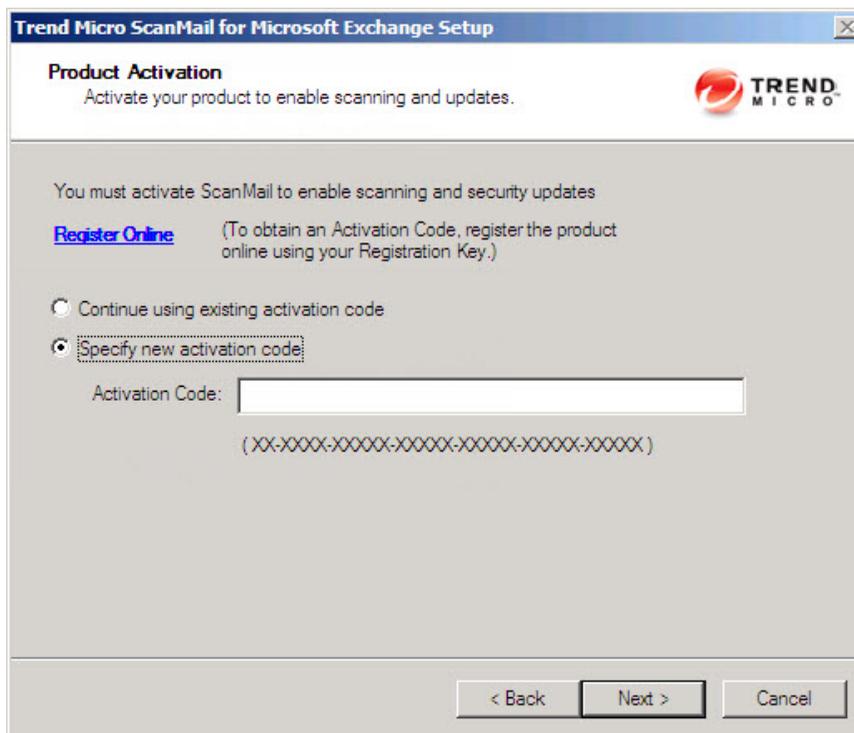
The **Target Server System Requirements Checking** screen appears.



10. Review the settings.
11. Click **Next** to continue.

If you use Windows domain account, you must provide the domain password to continue.

The **Product Activation** screen appears.



12. Perform one of the following options:

- Select **Continue using existing activation code** .
- Select **Specify new activation code** . Type the activation code.

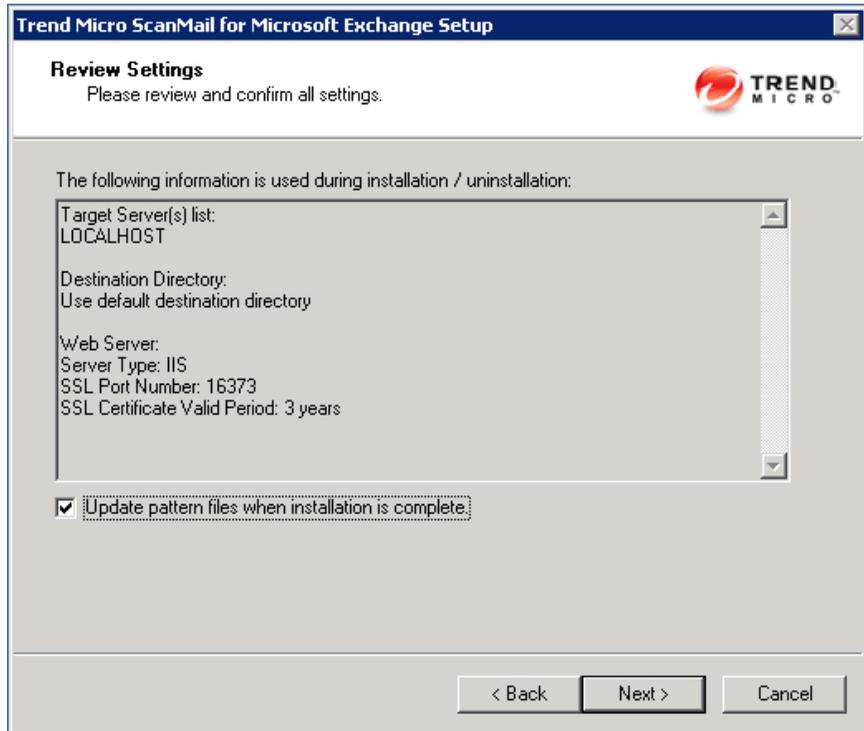


**Note**

You can copy an Activation Code and paste it in the input field of the Activation Code on this screen.

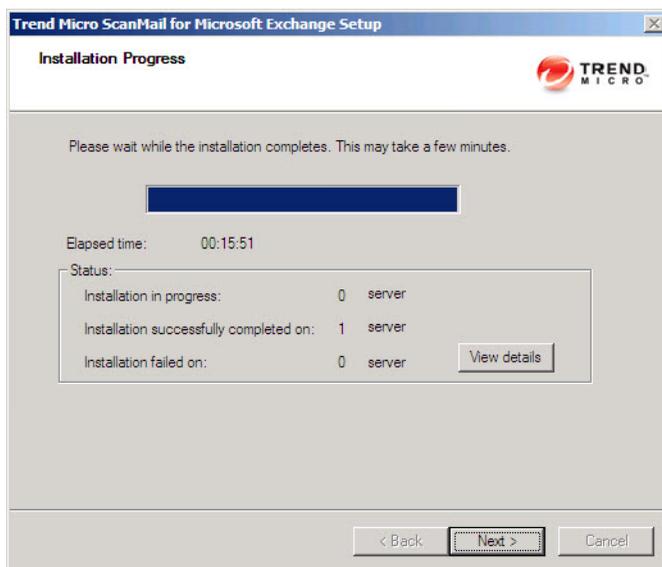
13. Click **Next** .

The **Review Settings** screen appears.



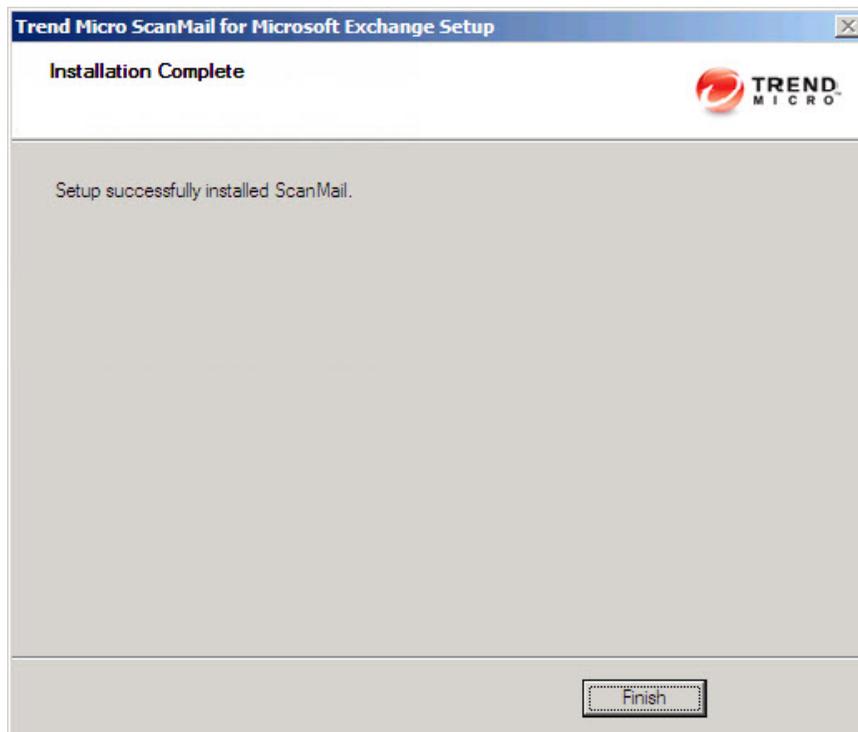
14. Review your settings and select the **Update pattern files when installation is complete** check box if you want to update pattern files immediately after installation. Click **Next** to continue.

The **Installation Progress** screen appears.



15. Click **View details** to display a list of each computer to which you are installing ScanMail and the status of each computer. Click **Next** when the installation completes.

The **Installation Complete** screen appears.



- 16.** This screen informs you that the installation was successful. Click **Finish** to exit the Setup program.



# Chapter 4

## Performing Post-Installation Tasks

Perform post-installation tasks to ensure that ScanMail was successfully installed.

Topics in this chapter:

- *Verifying a Successful Installation on page 4-2*
- *About the ScanMailManagement Pack on page 4-3*
- *Testing Your Installation on page 4-4*
- *Spam Folder Configuration on page 4-6*

## Verifying a Successful Installation

Check for ScanMail folders, services, and registry keys to verify a successful installation.

**TABLE 4-1. Successful Installation Verification**

ITEM	SETTINGS
Installation folder	C:\Program Files\Trend Micro\SMEX\
Services	<ul style="list-style-type: none"> <li>• ScanMail for Microsoft Exchange Master Service</li> <li>• ScanMail EUQ Monitor Service</li> </ul> <hr/> <p> <b>Note</b> This service is disabled for Exchange Server 2016 and 2019 environments.</p> <hr/> <ul style="list-style-type: none"> <li>• ScanMail for Microsoft Exchange Remote Configuration Server</li> </ul> <hr/> <p> <b>Note</b> This service is not added to Exchange Server Edge Transport server roles.</p> <hr/> <ul style="list-style-type: none"> <li>• ScanMail for Microsoft Exchange System Watcher</li> </ul>
Registry keys (All versions)	HKEY_LOCAL_MACHINE\SOFTWARE\TrendMicro\ScanMail for Exchange

ITEM	SETTINGS
Registry keys <ul style="list-style-type: none"> <li>• Mailbox Servers</li> </ul>	<ul style="list-style-type: none"> <li>• HLM\SYSTEM\CurrentControlSet\Services\MSEExchangeIS\VirusScan</li> <li>• HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\MSEExchangeIS\&lt;Server-Name&gt;\Private-&lt;MDB-GUID&gt;\VirusScanEnabled</li> <li>• HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\MSEExchangeIS\&lt;Server-Name&gt;\Private-&lt;MDB-GUID&gt;\VirusScanBackgroundScanning</li> <li>• HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\MSEExchangeIS\&lt;Server-Name&gt;\Public-&lt;MDB-GUID&gt;\VirusScanEnabled</li> <li>• HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\MSEExchangeIS\&lt;Server-Name&gt;\Public-&lt;MDB-GUID&gt;\VirusScanBackgroundScanning</li> </ul> <hr/> <div style="display: flex; align-items: flex-start;">  <div> <p><b>Note</b></p> <p>These keys are not added to Edge Transport Servers or Hub Transport Servers.</p> </div> </div>

## About the ScanMailManagement Pack

ScanMail provides full support for Systems Center Operations Manager (SCOM) 2012 and 2016. Administrators can import the ScanMail management package to System Center Operations Manager (SCOM) from the following path in the ScanMail installation package to use ScanMail with Systems Center Operations Manager (SCOM):

```
\Management Pack
\Trend.Micro.ScanMail.for.Microsoft.Exchange.xml
```

## Testing Your Installation

Trend Micro recommends verifying installation by testing ScanMail features using the EICAR test script. EICAR, the European Institute for Computer Antivirus Research, developed the test script to confirm that you have properly installed and configured your antivirus software.

Visit <http://www.eicar.org> for more information.

The EICAR test script is a text file with a \*.com extension. It is inert. It is not a virus/malware, it does not replicate, and it does not contain a payload.



### **WARNING!**

Never use real viruses/malware to test your antivirus installation.

Depending on how you have configured your Exchange servers, you might need to disable antivirus products for the duration of the EICAR test (otherwise, the virus/malware might be detected before it arrives at the Exchange server). This leaves your servers vulnerable to infection. For this reason, Trend Micro recommends that you only conduct the EICAR test in a test environment.

---

## Testing Manual Scan

---

### **Procedure**

1. Connect a valid mail client to the Exchange Server being tested.
2. Change the Real-time virus scan action to **Pass** or so that all the messages and text file attachments can be delivered to the database you selected for the manual scan.
3. Open your mail client and create a test message called *Test ScanMail*, attach a copy of the EICAR test file to your email and send that email to your test mailbox
4. Configure your manual scan or accept the Trend Micro default configurations. The default virus scanning configuration scans all files and cleans viruses.

5. Perform a manual scan. ScanMail will detect the EICAR virus and take the action that you have configured against it.
  6. View the results in the **Virus Summary** screen or a ScanMail log.
- 

## Testing Real-time Scan

---

### Procedure

1. Connect a valid mail client to the Exchange Server being tested.
  2. Download a copy of the standard industry EICAR test file for testing.
  3. Verify that the Real-time Scan and Real-time Monitor are running correctly. On the **Real-time Monitor** screen, check to see if you can read the message **Real-time scan has been running since** .
  4. Open your mail client and create a test message called *Test ScanMail* . Attach a copy of the EICAR test file to your email and send that email to your test mailboxes.
  5. After the message is sent to the mailboxes, switch back to the **Real-time Monitor** screen. You will see the message being scanned as it passes through the Real-time monitor. You will also see the test file being detected in the **Real-time Monitor** . In addition to the **Real-time Monitor** you can also review the security risk detection result in the Virus Log from the ScanMail product console.
- 

## Testing Notifications

---

### Procedure

1. Configure security risk scan to detect the virus/malware and notify the administrator.
  - a. Click **Security Risk Scan > Target** . Select **IntelliScan** if necessary.

- b. Click **Action** . Select **ActiveAction** and select **Notify** from the drop-down list.
  - c. Click **Notification** . Click **Notify administrator** and then click the icon to expand the page. Select **To** and type the email address where you want to send the notification.
  - d. Click **Save** .
2. Send an email containing the EICAR test script and verify that the administrator received the email.
    - a. Create a test message called *Test ScanMail* and attach a copy of the EICAR test script to your email.
    - b. Send the email to your test mailboxes.
    - c. Go to the administrator mailbox and view the notification.
- 

## Spam Folder Configuration

---



### Important

The End User Quarantine spam folder (along with Junk Email folder) is only available for Exchange Server 2013 environments. For Exchange Server 2016 and 2019, only Junk Email folder is available.

---

- Trend Micro Spam Folder

ScanMail creates a spam folder on all of the mailboxes on the Exchange server where you installed ScanMail . During the installation, the installation program prompted you to name this folder and it will have the name that you specified.

After installation, you can rename the spam folder using Microsoft Outlook. Trend Micro identifies the folder by ID, not by folder name.

- Spam detection levels

ScanMail also configures the spam detection level defaults. The spam detection level filters out spam messages arriving at the Exchange server.

- **High** : This is the most rigorous level of spam detection. ScanMail monitors all email messages for suspicious files or text, but there is greater chance of false positives. False positives are those email messages that ScanMail filters as spam when they are actually legitimate email messages.
- **Medium** : ScanMail monitors at a high level of spam detection with a moderate chance of filtering false positives.
- **Low** : This is the default setting. This is most lenient level of spam detection. ScanMail will only filter the most obvious and common spam messages, but there is a very low chance that it will filter false positives.



# Chapter 5

## Silent Installation

Install ScanMail to one or more servers using silent installation.

Topics in this chapter:

- *About Silent Installation on page 5-2*
- *Performing Silent Installation on page 5-3*

## About Silent Installation

This version of ScanMail supports silent installation. The steps in silent installation follow the same steps as regular installation.

The differences between the silent and standard installation processes are:

- The **Welcome** screen displays a message reminding you that ScanMail records the installation process into a preconfigured file.
- In recording mode, ScanMail only records the user name and password and does not log on to target server(s).
- Once the recording completes, the file name and location information are listed on the setup screen.
- The **Checking Target Server System Requirements** and **Selecting Target Server(s)** screens do not display.

## Silent Installation Limitations

The following lists the limitations for silent installation:

- Silent installations are only supported on local computers.
- Generate the preconfigured file by using recording mode the first time. Then, modify settings in the preconfigured file. However, do not modify settings in the **Do not edit** sections.
- Record settings separately for target servers with different languages. Do not apply preconfigured files recorded on an English operating system to a target server with a German operating system.

## Performing Silent Installation

### Procedure

1. Launch Windows command prompt.
2. Locate the *ScanMail for Microsoft Exchange* directory.
3. Type `Setup /R` to start recording mode.
4. Copy the preconfigured file (`setup-xxx.iss`) to the *ScanMail for Microsoft Exchange* directory when the recording completes.
5. Type `Setup /S <preconfigured filename>` to perform silent installation.

## Using an Existing Preconfigured File

The following table displays the parameters you can use to configure silent installation settings.

**TABLE 5-1. Silent Installation Setting Parameters**

PARAMETER	DESCRIPTION
<code>Setup /H  Help  ?</code>	Displays the <b>Help</b> screen.
<code>Setup /R &lt;config_file path&gt;</code>	Starts recording mode. If the path is empty, the default path is the Windows directory: <code>C:\Windows</code>
<code>Setup /S &lt;config_file&gt;</code>	Performs a silent installation with the file name you specify.
<code>Setup /output &lt;result_file&gt;</code>	Specifies the result file and name. The default path is the Windows directory: <code>C:\Windows\temp\ScanMail_SilentOutput.txt</code>



# Chapter 6

## Removing ScanMail

This chapter describes how to remove ScanMail.

Topics in this chapter:

- *Before Removing ScanMail on page 6-2*
- *Using the Setup Program on page 6-3*
- *Using the Windows Control Panel on page 6-12*
- *Manually Removing ScanMail from Exchange Servers on page 6-13*

## Before Removing ScanMail

Uninstallation removes the following components:

- ScanMail product console
- All program files
- EUQ, including end-user approved senders list
- Program folders
- Entries made to the registry

Uninstallation of ScanMail with Exchange Server does not remove the following components:

- Microsoft Visual C++ 2015 Redistributable
- Microsoft Visual C++ 2015 Redistributable (X64)



### **WARNING!**

- For single servers, uninstall ScanMail from the Windows Control Panel or the Uninstall program.
- 

## Privilege Requirements

The following table displays the minimum privileges required for uninstalling ScanMail .

**TABLE 6-1. Minimum Privileges Required for Uninstalling ScanMail**

EXCHANGE VERSION	MINIMUM PRIVILEGES	FEATURE LIMITATION WITHOUT DOMAIN ADMINISTRATOR PRIVILEGES
Exchange Server 2016/2019 Mailbox Servers	<ul style="list-style-type: none"> <li>• Local Administrator</li> <li>• Domain User</li> <li>• Exchange Organization Management Group</li> </ul>	N/A
Exchange Server 2013 Mailbox Servers	<ul style="list-style-type: none"> <li>• Local Administrator</li> <li>• Domain User</li> <li>• Exchange Organization Management Group</li> </ul>	Manual removal of EUQ mailbox required.
Exchange Server 2019, 2016, 2013 Edge Transport	Local Administrator	N/A

## Using the Setup Program

You can use the `setup.exe` program to uninstall ScanMail .

---

### Procedure

1. To remove ScanMail , run `setup.exe` .



#### Note

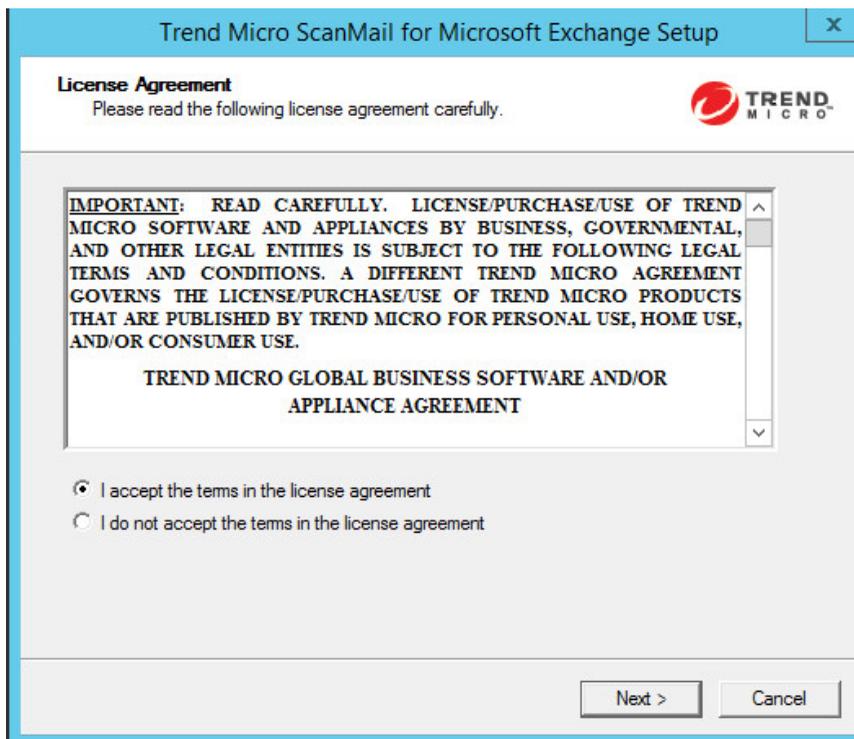
If, at any time, you click **Cancel** from the Setup program, the program will display an **Exit Setup** dialog box. When you click **Yes** from this dialog box, the uninstallation aborts.

---

The **Welcome to Trend Micro ScanMail for Microsoft Exchange Setup** screen appears.

2. Click **Next**.

The **License Agreement** screen appears.

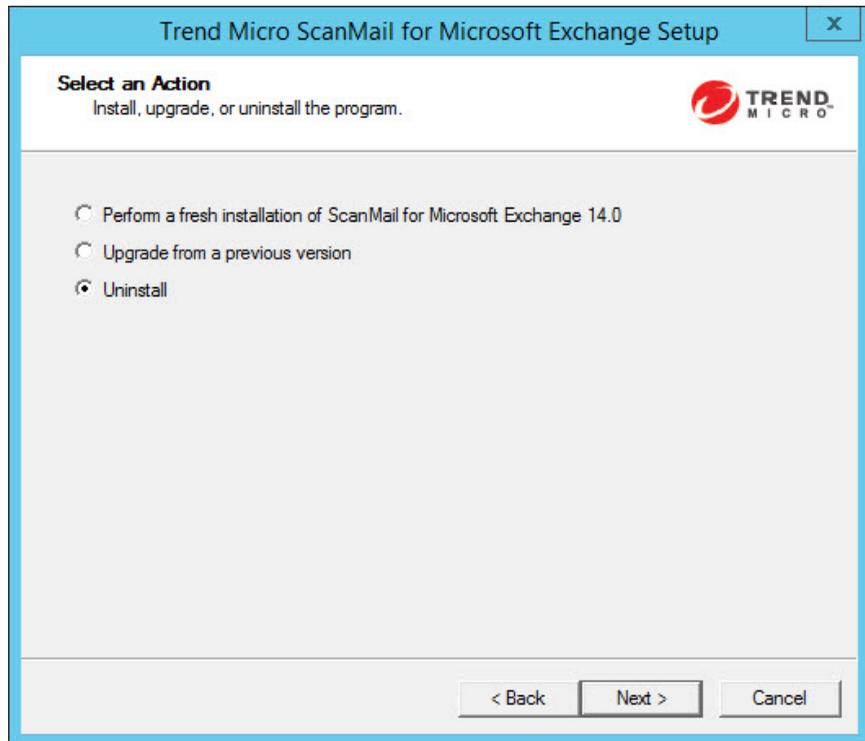


3. Click **I accept the terms in the license agreement** to agree to the terms of the agreement and continue installation. Click **Next** to continue.

**Note**

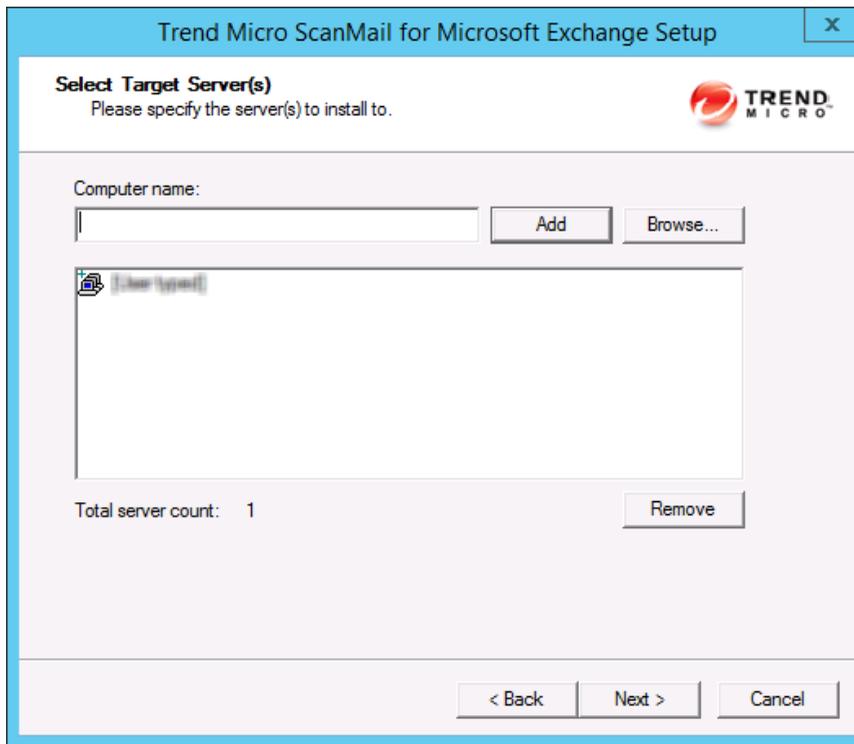
If you do not accept the terms, click **I do not accept the terms in the license agreement**. This terminates the installation without modifying your operating system.

The **Select an Action** screen appears.



4. Select **Uninstall** to remove ScanMail from your server(s).

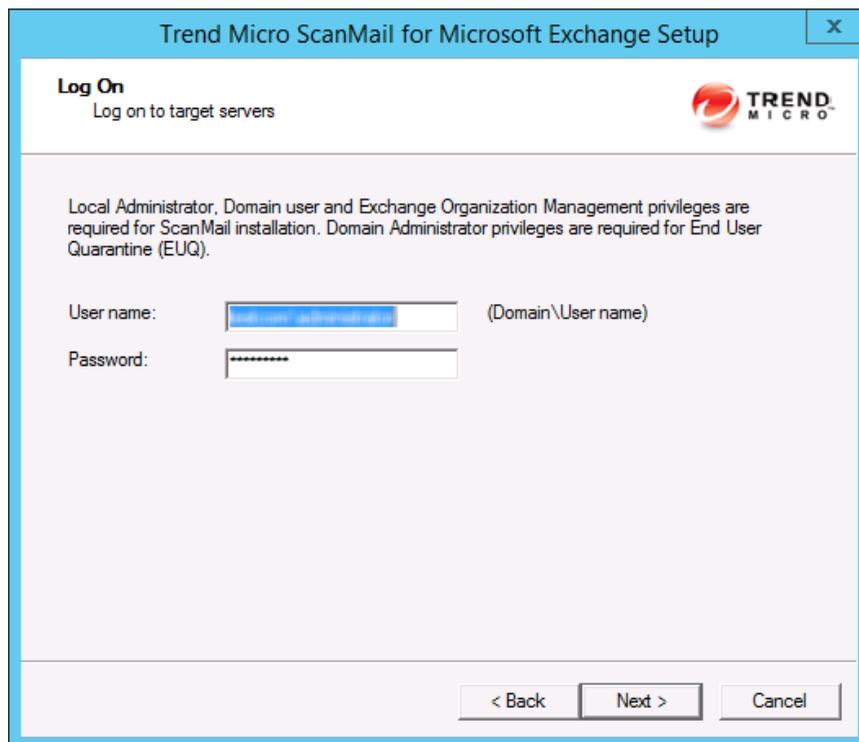
The **Select Target Server(s)** screen appears.



5. To uninstall ScanMail from a server:
  - a. Select the computers from which you want to uninstall ScanMail :
    - Type the name of the target server in the **Computer name** field and click **Add** to add the computers to the list of servers.
    - Click **Browse** and browse the computers that are available on your network, then double-click the domain or computers you want to add to the list.
    - Click **Remove** to remove a server from the list.

- b. Click **Next**.

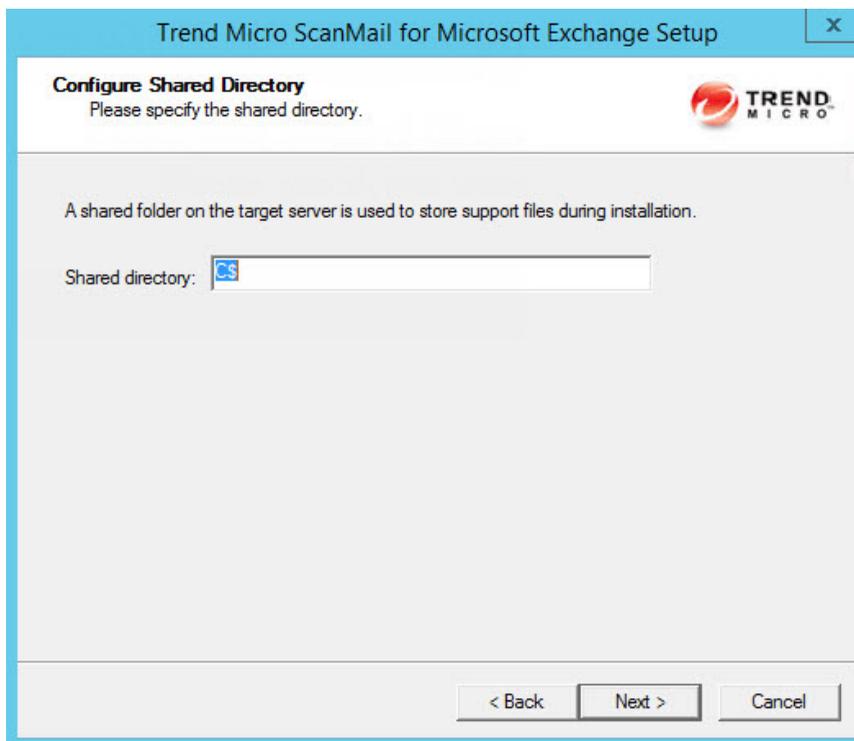
The **Log On** screen appears.



The screenshot shows a Windows-style dialog box titled "Trend Micro ScanMail for Microsoft Exchange Setup". The dialog has a blue header bar with a close button (X) in the top right corner. Below the header, the text "Log On" is displayed in bold, followed by "Log on to target servers" in a smaller font. The Trend Micro logo is positioned in the top right of the main content area. The main content area contains the following text: "Local Administrator, Domain user and Exchange Organization Management privileges are required for ScanMail installation. Domain Administrator privileges are required for End User Quarantine (EUQ).". Below this text are two input fields: "User name:" followed by a text box containing "trendmicro\administrator" and the label "(Domain\User name)", and "Password:" followed by a password box with eight asterisks. At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

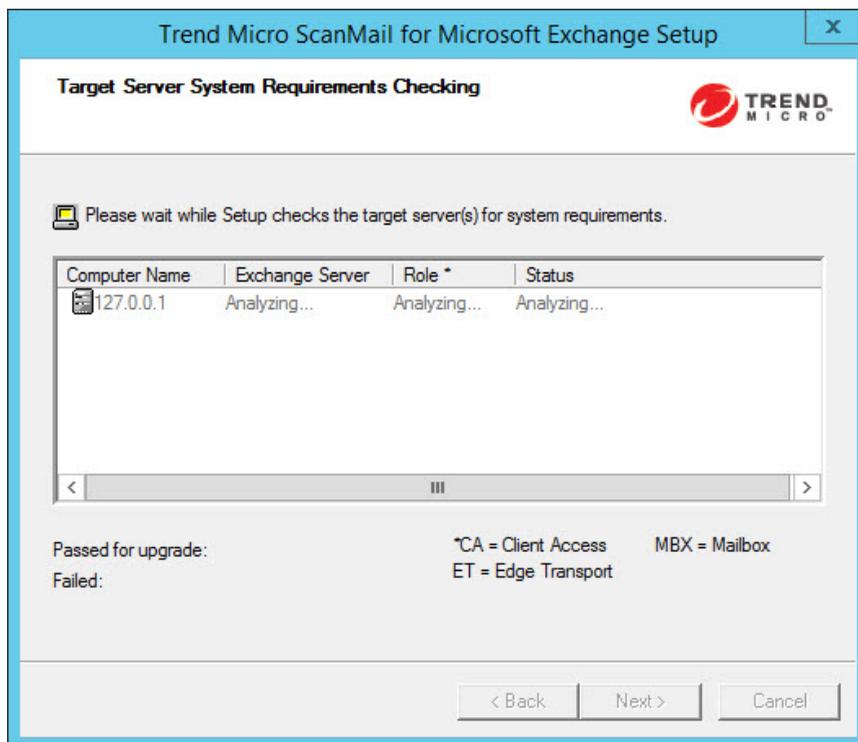
6. Type the user name and password to log on to the target server to uninstall ScanMail .
7. Click **Next**.

The **Configure Shared/Target Directory** screen appears.



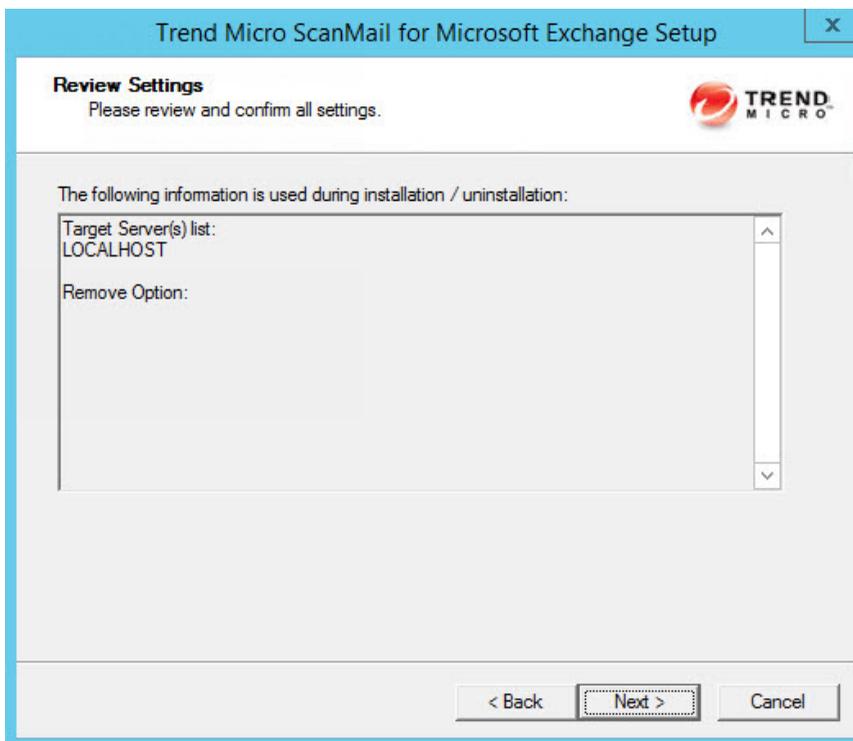
8. Use this screen to specify the shared directory for the target servers from where you will uninstall ScanMail .
  - a. Specify a folder on the target server for storing support files for the uninstallation process.
  - b. Click **Next**.

The **Target Server System Requirements Checking** screen appears.



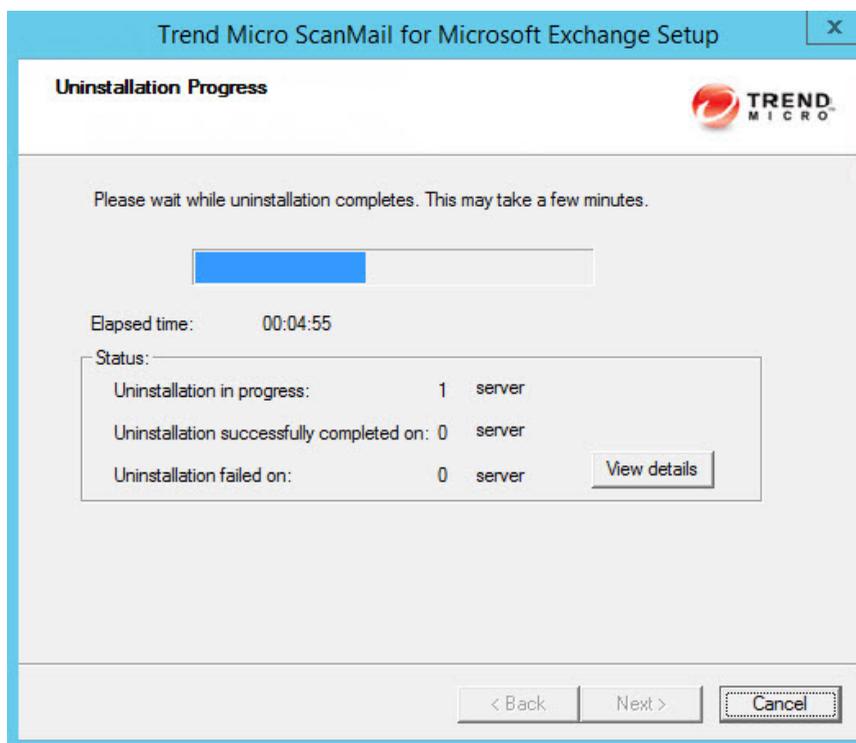
9. View the screen and ensure the settings for the uninstallation are correct.
10. Click **Next**.

The **Review Settings** screen appears.



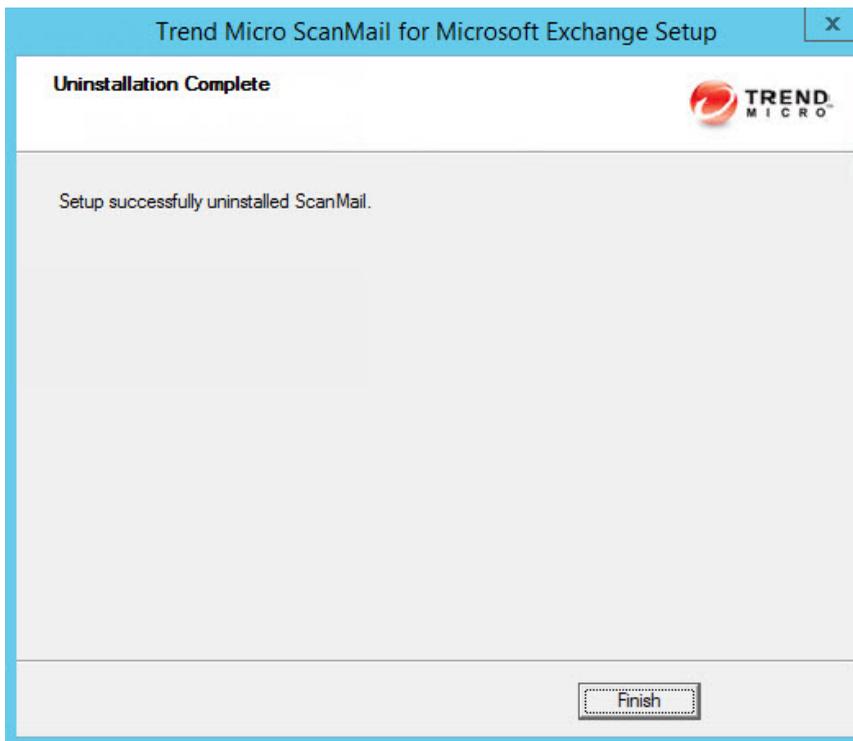
11. Review your settings.
12. Click **Next**.

The **Uninstallation Progress** screen appears.



**13.** When the uninstallation is complete, click **Next** to proceed.

The **Uninstallation Complete** screen appears to inform you that the servers successfully uninstalled.



14. Click **Finish** to exit the Setup program.

The Setup program removes ScanMail from the selected servers.

---

## Using the Windows Control Panel

You can remove ScanMail using the Microsoft™ Windows™ Control Panel. Using the Setup program to uninstall ScanMail removes all related

components and programs. Trend Micro recommends using the Setup.exe program to uninstall ScanMail.

---

### Procedure

1. Go to Windows **Control Panel** > **Add or Remove Programs**.
2. Click the Trend Micro ScanMail *for Microsoft Exchange* program and then click **Remove**.
3. At the prompt, select **Yes** to remove ScanMail.



#### Note

ScanMail installs Microsoft Visual C++ 2015 Redistributable and Microsoft Visual C++ 2015 Redistributable (X64) and they are not uninstalled when you uninstall ScanMail.

---

## Manually Removing ScanMail from Exchange Servers

Manually remove ScanMail from Exchange servers by following the instructions below.



#### Important

The uninstallation tool stops the Microsoft Exchange Transport (MsExchangeTransport) service during uninstallation. The service will restart automatically after the uninstallation completes.

---

### Procedure

1. Contact Trend Micro Support to obtain the uninstallation tool.
2. Follow the steps outlined in the accompanying readme file to remove ScanMail from Exchange 2019, 2016, and 2013 servers.

3. For installations that use a remote SQL Server database, remove the ScanMail database from the remote Microsoft™ SQL Server™ .
  - a. Use SQL Server Management Studio Express to connect to the remote SQL server hosting the ScanMail installation.
  - b. Delete the following ScanMail databases:
    - If you are removing an upgrade:
      - Conf\_HostName\_UUID
      - Log\_HostName\_UUID
      - Report\_HostName\_UUID
    - If you are removing a fresh installation:
      - ScanMail\_UUID
4. For installations with End User Quarantine (EUQ) enabled, manually remove the following database from the Exchange server:

EUQ\_[ServerName]

---

# Chapter 7

## Technical Support

Learn about the following topics:

- *Troubleshooting Resources on page 7-2*
- *Contacting Trend Micro on page 7-3*
- *Sending Suspicious Content to Trend Micro on page 7-4*
- *Other Resources on page 7-5*

## 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 from the available products or click the appropriate button to search for solutions.
3. Use the **Search Support** box to search for available solutions.
4. If no solution is found, click **Contact Support** and select the type of support needed.



#### Tip

To submit a support case online, visit the following URL:

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

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

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### Threat Encyclopedia

Most malware today consists of blended threats, which combine two or more technologies, to bypass computer security protocols. Trend Micro combats this complex malware with products that create a custom defense strategy.

The Threat Encyclopedia provides a comprehensive list of names and symptoms for various blended threats, including known malware, spam, malicious URLs, and known vulnerabilities.

Go to <http://about-threats.trendmicro.com/us/threatencyclopedia#malware> to learn more about:

- Malware and malicious mobile code currently active or "in the wild"
- Correlated threat information pages to form a complete web attack story
- Internet threat advisories about targeted attacks and security threats
- Web attack and online trend information
- Weekly malware reports

## Contacting Trend Micro

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

Address	Trend Micro, Incorporated 225 E. John Carpenter Freeway, Suite 1500 Irving, Texas 75062 U.S.A.
Phone	Phone: +1 (817) 569-8900 Toll-free: (888) 762-8736
Website	<a href="https://www.trendmicro.com">https://www.trendmicro.com</a>
Email address	<a href="mailto:support@trendmicro.com">support@trendmicro.com</a>

- Worldwide support offices:  
<https://www.trendmicro.com/us/about-us/contact/index.html>
- Trend Micro product documentation:

<https://docs.trendmicro.com>

## 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 connected hardware or devices
- Amount of memory and free hard disk space
- Operating system and service pack version
- Version of the installed agent
- Serial number or Activation Code
- Detailed description of install environment
- Exact text of any error message received

## Sending Suspicious Content to Trend Micro

Several options are available for sending suspicious content to Trend Micro for further analysis.

### Email Reputation Services

Query the reputation of a specific IP address and nominate a message transfer agent for inclusion in the global approved list:

<https://ers.trendmicro.com/>

Refer to the following Knowledge Base entry to send message samples to Trend Micro:

<http://esupport.trendmicro.com/solution/en-US/1112106.aspx>

## File Reputation Services

Gather system information and submit suspicious file content to Trend Micro:

<http://esupport.trendmicro.com/solution/en-us/1059565.aspx>

Record the case number for tracking purposes.

## Web Reputation Services

Query the safety rating and content type of a URL suspected of being a phishing site, or other so-called "disease vector" (the intentional source of Internet threats such as spyware and malware):

<http://global.sitesafety.trendmicro.com/>

If the assigned rating is incorrect, send a re-classification request to Trend Micro.

## 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.

## 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.

## Documentation Feedback

Trend Micro always seeks to improve its documentation. If you have questions, comments, or suggestions about this or any Trend Micro document, please go to the following site:

<https://docs.trendmicro.com/en-us/survey.aspx>

# Appendix A

## Preconfigured Files

Preconfigured files are used for Silent Installation. To perform silent installation, record a new preconfigured file. There are twelve sections in each preconfigured file. The following table lists the different sections. Use the following table as a reference if you want to manually modify a preconfigured file.

**TABLE A-1. Preconfigured Files**

SECTION	CONTENTS
Logon	<ul style="list-style-type: none"> <li>• LogonUserDomain=&lt;User's configuration&gt;</li> <li>• LogonUserName=&lt;User's configuration&gt;</li> </ul>
Directory	<ul style="list-style-type: none"> <li>• TempDir=smextemp</li> <li>• ShareName=C\$</li> </ul> <hr/> <div style="display: flex; align-items: flex-start;">  <div> <p><b>Note</b></p> <p>This is the default setting and can be changed.</p> </div> </div> <hr/> <ul style="list-style-type: none"> <li>• TargetDir=C:\Program Files\Trend Micro\Smex</li> </ul> <hr/> <div style="display: flex; align-items: flex-start;">  <div> <p><b>Note</b></p> <p>This is the default setting and can be changed.</p> </div> </div>

SECTION	CONTENTS
	<ul style="list-style-type: none"> <li>• UseDefaultProgPath=0 or 1</li> </ul> <hr/> <p> <b>Note</b> 0 uses your configuration and 1 uses the default</p>
Activation	MasterACCode=<User's configuration>
Proxy	<ul style="list-style-type: none"> <li>• UseProxy=0</li> </ul> <hr/> <p> <b>Note</b> 0 is disable, 1 is enable</p> <hr/> <ul style="list-style-type: none"> <li>• DoAUAfterInstall=0</li> </ul> <hr/> <p> <b>Note</b> 0 is disable, 1 is enable</p> <hr/> <ul style="list-style-type: none"> <li>• ProxyURL=&lt;Your configuration&gt;</li> <li>• ProxyPort=&lt;Your configuration&gt;</li> </ul> <hr/> <p> <b>Note</b> The range is 1 to 65535</p> <hr/> <ul style="list-style-type: none"> <li>• ProxyUsername=&lt;Your configuration&gt;</li> <li>• EnableSocks5=0 or 1</li> </ul> <hr/> <p> <b>Note</b> 0 is disable, 1 is enable</p>
Web	<ul style="list-style-type: none"> <li>• IISSiteType=0 or 1</li> </ul> <hr/> <p> <b>Note</b> 0 is Virtual Web Site, 1 is Default Web Site. This setting is only applicable when IIS is selected.</p>

SECTION	CONTENTS
	<ul style="list-style-type: none"> <li data-bbox="557 248 947 272">• WebPort=&lt;Your configuration&gt;</li> </ul> <hr/> <p data-bbox="610 321 884 378"> <b>Note</b> The range is 1 to 65535</p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 410 947 435">• SSLPort=&lt;Your configuration&gt;</li> </ul> <hr/> <p data-bbox="610 483 884 540"> <b>Note</b> The range is 1 to 65535</p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 573 1166 597">• SSLValidPeriodCertificate=&lt;Your configuration&gt;</li> </ul>
ServerManagement	<ul style="list-style-type: none"> <li data-bbox="557 621 951 646">• CreateNewConsoleAccount=0 or 1</li> </ul> <hr/> <p data-bbox="610 695 1143 751"> <b>Note</b> 0 uses the current or skip, 1 creates a new account</p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 784 1045 808">• ConsoleUsername=&lt;Your configuration&gt;</li> <li data-bbox="557 833 964 857">• ActivateServerManagement=0 or 1</li> </ul> <hr/> <p data-bbox="610 906 924 963"> <b>Note</b> 0 is deactivate, 1 is activate</p> <hr/>
SMTP	<p data-bbox="557 1003 803 1027">EnableSMTPScanning=1</p> <hr/> <p data-bbox="565 1076 840 1133"> <b>Note</b> 0 is disable, 1 is enable</p> <hr/>
EUQ	<ul style="list-style-type: none"> <li data-bbox="557 1174 813 1198">• ActivateEUQ=0 or 1</li> </ul> <hr/> <p data-bbox="610 1247 924 1304"> <b>Note</b> 0 is deactivate, 1 is activate</p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 1336 1119 1360">• IntegrateWithOutlook2K3JunkMailFolder=0 or 1</li> </ul>

SECTION	CONTENTS
	<p> <b>Note</b> 0 is disable, 1 is enable</p> <hr/> <ul style="list-style-type: none"> <li>UseDefaultSpamFolderName=0 or 1</li> </ul> <hr/> <p> <b>Note</b> 0 uses your configuration and 1 uses the default</p> <hr/> <ul style="list-style-type: none"> <li>SpamFolderName=Spam Mail</li> </ul> <hr/> <p> <b>Note</b> This is default folder name and can be changed.</p> <hr/> <ul style="list-style-type: none"> <li>SpamMsgRetainDay=14</li> </ul> <hr/> <p> <b>Note</b> This is default setting and can be changed. The range is 0 to 30.</p>
CMAgent	<ul style="list-style-type: none"> <li>RegisterCMAgent=0 or 1</li> </ul> <hr/> <p> <b>Note</b> 0 is disable, 1 is enable</p> <hr/> <ul style="list-style-type: none"> <li>CMServerAddress=&lt;Your configuration&gt;</li> <li>CMServerPortNumber=443</li> </ul> <hr/> <p> <b>Note</b> The range is 1 to 65535</p> <hr/> <ul style="list-style-type: none"> <li>ConnectCMServerUsingHTTPS=0 or 1</li> </ul> <hr/> <p> <b>Note</b> 0 is disable, 1 is enable</p>

SECTION	CONTENTS
	<ul style="list-style-type: none"> <li data-bbox="557 245 978 269">• ConnectCMServerUsingProxy=0 or 1</li> </ul> <hr/> <p data-bbox="610 318 884 380">  <b>Note</b>  0 is disable, 1 is enable </p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 410 1009 459">• ConnectCMServerProxyAddress=&lt;Your configuration&gt;</li> <li data-bbox="557 483 964 508">• ConnectCMServerUseSOCKS5=0 or 1</li> </ul> <hr/> <p data-bbox="610 557 884 618">  <b>Note</b>  0 is disable, 1 is enable </p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 646 1022 695">• ConnectCMServerProxyUserName=&lt;Your configuration&gt;</li> <li data-bbox="557 719 1094 743">• CMServerWebUserName=&lt;Your configuration&gt;</li> <li data-bbox="557 768 1009 792">• ConnectCMServerProxyPortNumber=80</li> </ul> <hr/> <p data-bbox="610 841 884 902">  <b>Note</b>  The range is 1 to 65535 </p>
Do NOT edit these settings	<ul style="list-style-type: none"> <li data-bbox="557 930 1022 954">• LogonPassword=&lt;Your configuration&gt;</li> </ul> <hr/> <p data-bbox="610 1003 924 1065">  <b>Note</b>  Password does not display. </p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 1092 892 1117">• ExchangeType=1, 2, 3 or 4</li> </ul>

SECTION	CONTENTS
	<p> <b>Note</b></p> <ul style="list-style-type: none"><li>• 1 is “Exchange 2010 Edge Transport Server”</li><li>• 2 is “Exchange 2010 Hub Transport Server / Mailbox Server”</li><li>• 3 is “Exchange 2013 / 2016 / 2019 Mailbox Server”</li><li>• 4 is “Exchange 2013 / 2016 2019 Edge Transport Server”</li></ul> <hr/> <p>• ProxyPassword=&lt;Your configuration&gt;</p> <hr/> <p> <b>Note</b> Password does not display.</p> <hr/> <p>• ConsolePassword=&lt;Your configuration&gt;</p> <hr/> <p> <b>Note</b> Password does not display.</p> <hr/> <p>• EUQInstallLangID=1033</p> <hr/> <p> <b>Note</b> Do not change this setting.</p> <hr/> <p>• EUQDefaultLangID=9</p> <hr/> <p> <b>Note</b> Do not change this setting.</p> <hr/> <p>• ConnectCMServerProxyPassword=&lt;Your configuration&gt;</p> <hr/> <p> <b>Note</b> Password does not display.</p>

SECTION	CONTENTS
	<ul style="list-style-type: none"> <li data-bbox="557 245 1095 269">• CMServerWebPassword=&lt;Your configuration&gt;</li> </ul> <hr/> <p data-bbox="610 318 924 380">  <b>Note</b>            Password does not display.         </p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 410 1032 435">• ConsoleGroup=&lt;User's configuration&gt;</li> </ul> <hr/> <p data-bbox="610 483 1170 573">  <b>Note</b>            For example: DomainName\Group, do not modify the group name         </p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 604 911 628">• ServerManagementGroupSid=</li> </ul> <hr/> <p data-bbox="610 677 874 738">  <b>Note</b>            Do not modify the SID         </p> <hr/>
RemoteSQL with Windows Authentication	<ul style="list-style-type: none"> <li data-bbox="557 773 973 797">• RemoteSQLWindowsAuthentication</li> </ul> <hr/> <p data-bbox="610 846 1150 935">  <b>Note</b>            0 indicates SQL account authentication; 1 indicates Windows authentication.         </p> <hr/> <ul style="list-style-type: none"> <li data-bbox="557 966 1069 990">• RemoteSQLUserName=&lt;Your configuration&gt;</li> </ul>

SECTION	CONTENTS
	<p> <b>Note</b></p> <p>If you configure <code>RemoteSQLWindowsAuthentication</code> to use Windows authentication, the user name is the Windows account. Make sure the account is granted the following privileges:</p> <ul style="list-style-type: none"> <li>• Database privilege: <ul style="list-style-type: none"> <li>• If you choose to create a new database for ScanMail: <code>dbcreator</code> role</li> <li>• If you choose to use an existing database for ScanMail: <code>db_owner</code> role</li> </ul> </li> <li>• Other privileges: <ul style="list-style-type: none"> <li>• Local Admin</li> <li>• Exchange Organization Management Group</li> <li>• Exchange Application Impersonation role</li> </ul> </li> </ul> <p>For details about creating the account, see Step 2 in <a href="#">Installing with a Remote SQL Server on page 1-15</a>.</p> <hr/> <ul style="list-style-type: none"> <li>• <code>RemoteSQLPassword=&lt;Your configuration&gt;</code></li> </ul> <hr/> <p> <b>Note</b></p> <p>The Remote SQL password is encrypted.</p> <hr/>
RemoteSQL with SQL Authentication	<ul style="list-style-type: none"> <li>• <code>RemoteSQLServerDataSource=&lt;Your configuration&gt;</code></li> <li>• <code>RemoteSQLUserName=&lt;Your configuration&gt;</code></li> </ul>

SECTION	CONTENTS
	<p data-bbox="610 256 717 293"> <b>Note</b></p> <p data-bbox="669 297 1182 402">If you configure <code>RemoteSQLWindowsAuthentication</code> to use SQL account authentication, the user name is the SQL account. Make sure the account is granted the following privilege:</p> <ul data-bbox="669 418 1128 540" style="list-style-type: none"> <li data-bbox="669 418 1128 467">• If you choose to create a new database for ScanMail: <code>dbcreator</code> role</li> <li data-bbox="669 492 1128 540">• If you choose to use an existing database for ScanMail: <code>db_owner</code> role</li> </ul> <p data-bbox="669 565 1182 613">For details about creating the account, see Step 2 in <a href="#">Installing with a Remote SQL Server on page 1-15</a>.</p> <hr/> <ul data-bbox="561 646 1072 670" style="list-style-type: none"> <li data-bbox="561 646 1072 670">• <code>RemoteSQLPassword=&lt;Your configuration&gt;</code></li> </ul> <hr/> <p data-bbox="610 716 717 753"> <b>Note</b></p> <p data-bbox="669 756 1048 781">The Remote SQL password is encrypted.</p> <hr/> <ul data-bbox="561 813 974 837" style="list-style-type: none"> <li data-bbox="561 813 974 837">• <code>RemoteSQLWindowsAuthentication</code></li> </ul> <hr/> <p data-bbox="610 883 717 920"> <b>Note</b></p> <p data-bbox="669 924 1153 972">0 indicates SQL account authentication; 1 indicates Windows authentication.</p> <hr/> <ul data-bbox="561 1005 1169 1029" style="list-style-type: none"> <li data-bbox="561 1005 1169 1029">• <code>RemoteSQLExistingDatabase=&lt;Your configuration&gt;</code></li> </ul> <hr/> <p data-bbox="610 1075 717 1112"> <b>Note</b></p> <p data-bbox="669 1115 1102 1140">If left blank, ScanMail creates a new database.</p>



# Appendix B

## Glossary

The following is a list of terms in this document:

TERM	DESCRIPTION
Activation Code	A 37-character code, including hyphens, that is used to activate ScanMail  See also, Registration Key
ActiveUpdate	A Trend Micro utility that enables on-demand or background updates to the virus pattern file and scan engine, as well as the anti-spam rules database and anti-spam engine.
Adware	Similar to spyware, adware gathers user data, such as web surfing preferences, that could be used for advertising purposes.
Anti-spam	Refers to a filtering mechanism, designed to identify and prevent delivery of unsolicited advertisements, pornography, and other “nuisance” mail.
Approved sender	A sender whose messages are not processed by spam filters.
Attachment	A file attached to (sent with) an email message
Blocked sender	A sender whose messages are always deleted
Body (email body)	The content of an email message

<b>TERM</b>	<b>DESCRIPTION</b>
Boot sector viruses	A type of virus that infects the boot sector of a partition or a disk.
Clean	To remove virus code from a file or message.
Compressed file	A single file containing one or more separate files plus information to allow them to be extracted by a suitable program, such as WinZip
Configuration	Selecting options for how ScanMail will function, for example, selecting whether to quarantine or delete a virus-infected email message.
Content filtering	Scanning email messages for content (words or phrases) prohibited by your organization's Human Resources or IT messaging policies, such as hate mail, profanity, or pornography.
Default	<p>A value that pre-populates a field in the management console interface</p> <p>A default value represents a logical choice and is provided for convenience. Use default values as-is, or change them.</p>
Domain Name System (DNS)	A general-purpose data query service chiefly used on the Internet for translating host names into IP addresses
Domain Name System (DNS) resolution	<p>When a DNS client requests host name and address data from a DNS server, the process is called resolution</p> <p>Basic DNS configuration results in a server that performs default resolution. For example, a remote server queries another server for data on a machine in the current zone. Client software on the remote server queries the resolver, which answers the request from its database files.</p>
Denial of Service Attack (DoS Attack)	An attack on a computer or network that causes a loss of 'service', namely a network connection. Typically, DoS attacks negatively affect network bandwidth or overload computer resources such as memory.
Dialers	Software that changes client Internet settings and can force the client to dial pre-configured phone numbers through a modem.

<b>TERM</b>	<b>DESCRIPTION</b>
Domain name	<p>The full name of a system, consisting of its local host name and its domain name, for example, tellsitall.com</p> <p>A domain name should be sufficient to determine a unique Internet address for any host on the Internet. This process, called name resolution, uses the Domain Name System (DNS).</p>
Dynamic Host Control Protocol (DHCP)	<p>A device, such as a computer or switch, must have an IP address to be connected to a network, but the address does not have to be static</p> <p>A DHCP server, using the Dynamic Host Control Protocol, can assign and manage IP addresses dynamically every time a device connects to a network.</p>
Dynamic IP Address (DIP)	<p>A Dynamic IP address is an IP address that is assigned by a DHCP server</p> <p>The MAC address of a computer will remain the same, however, the computer may be assigned a new IP address by the DHCP server depending on availability.</p>
End-User License Agreement (EULA)	<p>An End User License Agreement or EULA is a legal contract between a software publisher and the software user</p> <p>It typically outlines restrictions on the side of the user, who can refuse to enter into the agreement by not clicking I accept during installation. Clicking I do not accept ends the installation of the software product.</p> <p>Many users inadvertently agree to the installation of spyware and other types of grayware into their computers when they click I accept on EULA prompts displayed during the installation of certain free software.</p>
End User Quarantine	<p>The End User Quarantine is a tool that adds extra spam management features to ScanMail . During installation, ScanMail adds a folder to the server-side mailbox of each end user. When spam messages arrive, the system quarantines them in this folder according to spam filter rules predefined by ScanMail . End users can view this spam folder to open, read, or delete the suspect email messages.</p>

<b>TERM</b>	<b>DESCRIPTION</b>
Executable file	A binary file containing a program in machine language which is ready to be executed (run)
False positive	An email message that was caught by the spam filter and identified as spam, but is actually not spam.
File Transfer Protocol (FTP)	FTP is a standard protocol used for transporting files from a server to a client over the Internet  Refer to Network Working Group RFC 959 for more information.
File type	The kind of data stored in a file  Most operating systems use the file name extension to determine the file type. The file type is used to choose an appropriate icon to represent the file in a user interface, and the correct application with which to view, edit, run, or print the file.
Gateway	A device that enables data to flow between different networks
Spyware/Grayware	Files and programs, other than viruses, that can negatively affect the performance of the computers on your network. These include spyware, adware, dialers, joke programs, hacking tools, remote access tools, password cracking applications, and others. The ScanMail scan engine scans for grayware as well as viruses.
Hacker	See Virus writer.
Hacking tools	Tools used to help hackers enter computers, often through empty ports.
Hostname	The unique name composed of ASCII characters, by which a computer is known on a network
Hot Fixes and Patches	Workaround solutions to customer related problems or newly discovered security vulnerabilities that you can download from the Trend Micro website and deploy to the ScanMail server and/or client program
HTML, VBScript, or JavaScript viruses	Viruses that reside in web pages and are downloaded through a browser.

<b>TERM</b>	<b>DESCRIPTION</b>
HTTP (Hypertext Transfer Protocol)	The client-server TCP/IP protocol used on the World Wide Web for the exchange of HTML documents  It conventionally uses port 80.
HTTPS (Hypertext Transfer Protocol Secure)	A variant of HTTP used for handling secure transactions
Incoming	Email messages routed into your network.
IntelliScan	IntelliScan is a Trend Micro scanning technology that optimizes performance by examining file headers using true file type recognition, and scanning only file types known to potentially harbor malicious code. True file type recognition helps identify malicious code that can be disguised by a harmless extension name.
Internet Protocol (IP)	The internet protocol provides for transmitting blocks of data called datagrams from sources to destinations, where sources and destinations are hosts identified by fixed length addresses (RFC 791)
Java malicious code	Operating system-independent virus code written or embedded in Java.
Joke program	Software that causes a computer to behave abnormally, such as forcing the screen to shake.
LAN (Local Area Network)	A data communications network which is geographically limited, allowing easy interconnection of computers within the same building
License	Authorization by law to use ScanMail for Microsoft Exchange
Macro viruses	Unlike other virus types, macro viruses aren't specific to an operating system and can spread via email attachments, web downloads, file transfers, and cooperative applications.

<b>TERM</b>	<b>DESCRIPTION</b>
Maintenance Agreement	<p>A Maintenance Agreement is a contract between your organization and Trend Micro, regarding your right to receive technical support and product updates in consideration for the payment of applicable fees</p> <p>A license to the Trend Micro software usually includes the right to product updates, pattern file updates, and basic technical support (“Maintenance”) for one (1) year from the date of purchase only. After the first year, Maintenance must be renewed on an annual basis at Trend Micro’s then-current Maintenance fees.</p>
Mass-mailing behavior	A malicious program that has high damage potential, because it causes large amounts of network traffic.
Message size	The number of bytes occupied by a message and all its attachments
Notification	<p>A message that is forwarded to one or more of the following:</p> <ul style="list-style-type: none"><li>• System administrator</li><li>• Sender of a message</li><li>• Recipient of a message</li><li>• Other email address</li><li>• SNMP and Windows event log</li></ul> <p>The purpose of the notification is to communicate that an event has occurred, such as a virus being detected in a message</p>
Offensive content	Words or phrases in messages or attachments that are considered offensive to others, for example, profanity, sexual harassment, racial harassment, or hate mail.
Outgoing	Email messages or other data leaving your network; routed out.
Password cracking applications	Software that can help hackers decipher user names and passwords.

<b>TERM</b>	<b>DESCRIPTION</b>
Pattern file	<p>The pattern file, as referred to as the Official Pattern Release (OPR), is the latest compilation of patterns for identified viruses</p> <p>It is guaranteed to have passed a series of critical tests to ensure that you get optimum protection from the latest virus threats. This pattern file is most effective when used with the latest scan engine.</p>
Phish sites	<p>A website that lures users into providing personal details, such as credit card information. Links to phish sites are often sent in bogus email messages disguised as legitimate messages from well-known businesses.</p>
Ping	<p>A utility that sends an ICMP echo request to an IP address and waits for a response</p> <p>The Ping utility can determine if the machine with the specified IP address is online or not.</p>
Ping of Death	<p>A Denial of Service attack where a hacker directs an oversized ICMP packet at a target computer. This can cause the computer's buffer to overflow, which can freeze or reboot the machine.</p>
Post Office Protocol 3 (POP3)	<p>POP3 is a standard protocol for storing and transporting email messages from a server to a client email application</p>
Quarantine entire message	<p>To place email messages in an isolated directory (the Quarantine Directory) on the ScanMail scanner. Items placed in the quarantine directory are indexed in the ScanMail database.</p>
Quarantine message part	<p>To move the email message body or attachment to a restricted access folder, removing it as a security risk to the Exchange environment. ScanMail replaces the message part with the text/file you specify.</p>
Registration Key	<p>A 22-character code, including hyphens, that is used to register in the Trend Micro customer database</p> <p>See also, Activation Code.</p>
Remote access tools	<p>Tools used to help hackers remotely access and control a computer.</p>

<b>TERM</b>	<b>DESCRIPTION</b>
Scan	To examine items in a file in sequence to find those that meet a particular criteria
Scan engine	The module that performs antivirus scanning and detection in the host product to which it is integrated.
Secure Socket Layer (SSL)	SSL is a scheme proposed by Netscape Communications Corporation to use RSA public-key cryptography to encrypt and authenticate content transferred on higher-level protocols such as HTTP, NNTP, and FTP
SSL certificate	A digital certificate that establishes secure HTTPS communication between the Policy Server and the ACS server
Simple Mail Transport Protocol (SMTP)	SMTP is a standard protocol used to transport email messages from server to server, and client to server, over the Internet
SOCKS 4	<p>A TCP protocol used by proxy servers to establish a connection between clients on the internal network or LAN and computers or servers outside the LAN</p> <p>The SOCKS 4 protocol makes connection requests, sets up proxy circuits and relays data at the Application layer of the OSI model.</p>
Spam	Unsolicited email messages meant to promote a product or service.
Spyware/Grayware	A type of grayware that installs components on a computer for the purpose of recording web surfing habits (primarily for marketing purposes). Spyware sends this information to its author or to other interested parties when the computer is online. Spyware often downloads with items identified as 'free downloads' and does not notify the user of its existence or ask for permission to install the components. The information spyware components gather can include user keystrokes, which means that private information such as login names, passwords, and credit card numbers are vulnerable to theft.
Standard maintenance	See Maintenance Agreement

<b>TERM</b>	<b>DESCRIPTION</b>
Subject (message subject)	The title or topic of an email message, such as “Third Quarter Results” or “Lunch on Friday”  ScanMail uses the subject from the message header to determine the message subject.
Tag	To place an identifier, such as “Spam:” in the subject field of an email message.
Test virus	An inert file that acts like a real virus and is detectable by security risk-scanning software. Use test files, such as the EICAR test script, to verify that your antivirus installation is scanning properly.
Traffic	Data flowing between the Internet and your network, both incoming and outgoing
Transmission Control Protocol (TCP)	A connection-oriented, end-to-end reliable protocol designed to fit into a layered hierarchy of protocols which support multi-network applications  TCP relies on IP datagrams for address resolution. Refer to DARPA Internet Program RFC 793 for information.
TrendLabs	TrendLabs is Trend Micro's global network of antivirus research and product support centers that provide 24 x 7 coverage to Trend Micro customers around the world
Trojan horses	Executable programs that do not replicate but instead reside on systems to perform malicious acts, such as open ports for hackers to enter.
True file type	A virus scanning technology, to identify the type of information in a file by examining the file headers, regardless of the file name extension (which could be misleading).
Undesirable content	Words or phrases in messages or attachments that are considered offensive to others, for example, profanity, sexual harassment, racial harassment, or hate mail
Unsolicited email	See Spam

<b>TERM</b>	<b>DESCRIPTION</b>
Virus	<p>A computer virus is a program – a piece of executable code – that has the unique ability to infect. Like biological viruses, computer viruses can spread quickly and are often difficult to eradicate.</p> <p>In addition to replication, some computer viruses share another commonality: a damage routine that delivers the virus payload. While payloads may only display messages or images, they can also destroy files, reformat your hard drive, or cause other damage. Even if the virus does not contain a damage routine, it can cause trouble by consuming storage space and memory, and degrading the overall performance of your computer.</p>
Virus writer	Another name for a computer hacker. Someone who writes virus code.
Wildcard	<p>For ScanMail, an asterisk (*) represents any character</p> <p>For example, in the expression *ber, this expression can represent barber, number, plumber, timber, and so on.</p>
Worm	A self-contained program (or set of programs) that is able to spread functional copies of itself or its segments to other computer systems, often via email. A worm can also be called a network virus.
Zip file	A compressed archive (in other words, “zip file”) from one or more files using an archiving program such as WinZip

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