

Hosted Email Security Integration with Microsoft Office 365

-
- » This document highlights the benefits of Hosted Email Security (HES) for Microsoft™ Office™ 365 customers and provides step-by-step instruction on integration.



TABLE OF CONTENTS

Introduction	3
Benefits from Combining HES and Office 365	4
Understanding How Email Flows Works	5
Inbound Email Set Up	6
Outbound Email Set Up	18

INTRODUCTION

Office 365 is Microsoft's cloud solution for accessing email, calendar, and Microsoft office tools. Office 365 allows organizations to host their entire email architecture at an off-site location, and it allows Microsoft to manage all the day-to-day aspects of your organization's email.

Trend Micro has designed Hosted Email Security (HES) for customers who are using either cloud-based or onsite email.

Unlike traditional onsite email solutions where a simple cable could be moved in order to add a layer of protection, cloud-based solutions require a different approach. This document highlights the benefits of HES for Office 365 customers, as well as step-by-step instruction on integration. This integration guide assumes a functioning Office 365 deployment.

BENEFITS OF COMBINING HOSTED EMAIL SECURITY AND OFFICE 365

Moving your mail to the cloud does not mean you have to reduce your security. By integrating Trend Micro™ Hosted Email Security with Microsoft Office 365, you can now have the best of both worlds—true enterprise email security with the convenience of the cloud.

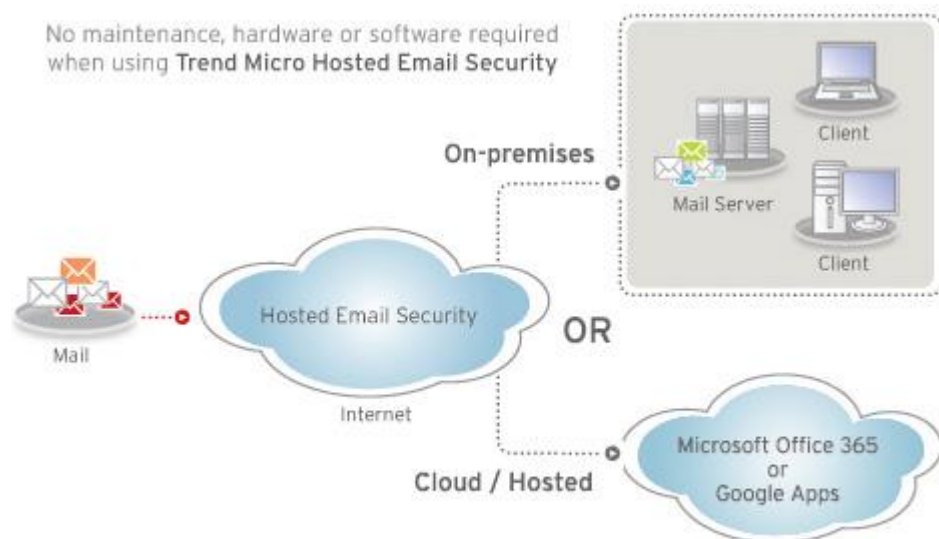
HES can provide the following features to enhance your Office 365 email security:

- **Layered protection:** Provides protection on phishing, spam, and graymail with multiple techniques, including sender reputation, content and image analysis, machine learning, and more.
- **Email fraud protection:** Protects against Business Email Compromise (BEC) with enhanced machine learning, combined with expert rules, analyzing both the header and content of the email
- **Cloud sandboxing:** Includes cloud sandboxing for automatic in-depth simulation and analysis of potentially malicious attachments in a secure virtual environment hosted by Trend Micro. Cloud sandbox leverages proven Trend Micro™ Deep Discovery™ sandboxing technology, which has achieved a “Recommended” rating by NSS Labs.

Adding HES on top of Microsoft Office 365 offers enhanced security, especially with spear-phishing and targeted attack protection, providing you with an additional layer of security against advanced malware and zero-day exploits.

UNDERSTANDING HOW EMAIL FLOW WORKS

In order to better understand how HES works in conjunction with Microsoft Office 365, the path the email message takes must first be understood.



1. An email is initiated from one organization to the other. Let's say an email from someone at Trend Micro to someone at Example.com is sent.
2. The Trend Micro mail server will look up the MX record of Example.com. This record will contain the Domain Name or IP address of the first hop in Example.com's email architecture. This first hop is the first level of inspection that Example.com wants performed on their email.
3. Since Example.com is using Trend Micro HES, this will be the first hop for the inbound email.
4. HES then inspects the email via Trend Micro's world class email and web reputation service for threats such as:
 - a. Spam
 - b. Phishing
 - c. Viruses
 - d. Spyware

5. If the email passes the HES checks, it is then sent to Example.com's next hop, which is their Microsoft Office 365 cloud email server.
6. After further processing by Microsoft Office 365, the email is then sent to the recipient's mailbox.

INBOUND EMAIL SET UP

Configuring your Hosted Email Security Settings

1. Configure the corresponding inbound settings in Trend Micro HES to route emails sent to your domain to Office 365.
 - a. Log into the HES main page
 - b. From the above column click on the following:
 - i. **Domains**
 - ii. **Add**
 - c. For the domain that is being routed:
 - i. Input the IP address or host name of your Office 365 Server in the "**Inbound Servers**" field.
This can either be found by performing an nslookup or through the user interface in Microsoft Office 365.
Note: Microsoft generates MX records for your domains when you set them up in Exchange Online.
 - ii. Input the **Port** for your Office 365 server.
(Normally, it's port 25)
 - iii. Input the **preference** for your server
(sometimes referred to as distance, is a value from 1 to 100.)
 - d. Click "**Add Domain**" to save your setting.

```
> set type=MX
> trendenablement.onmicrosoft.com
Server:      10.203.142.120
Address:     10.203.142.120#53

Non-authoritative answer:
trendenablement.onmicrosoft.com mail exchanger = 0 trendenablement.mail.protection.outlook.com.

Authoritative answers can be found from:
trendenablement.mail.protection.outlook.com      internet address = 207.46.163.138
trendenablement.mail.protection.outlook.com      internet address = 207.46.163.215
```

DNS records

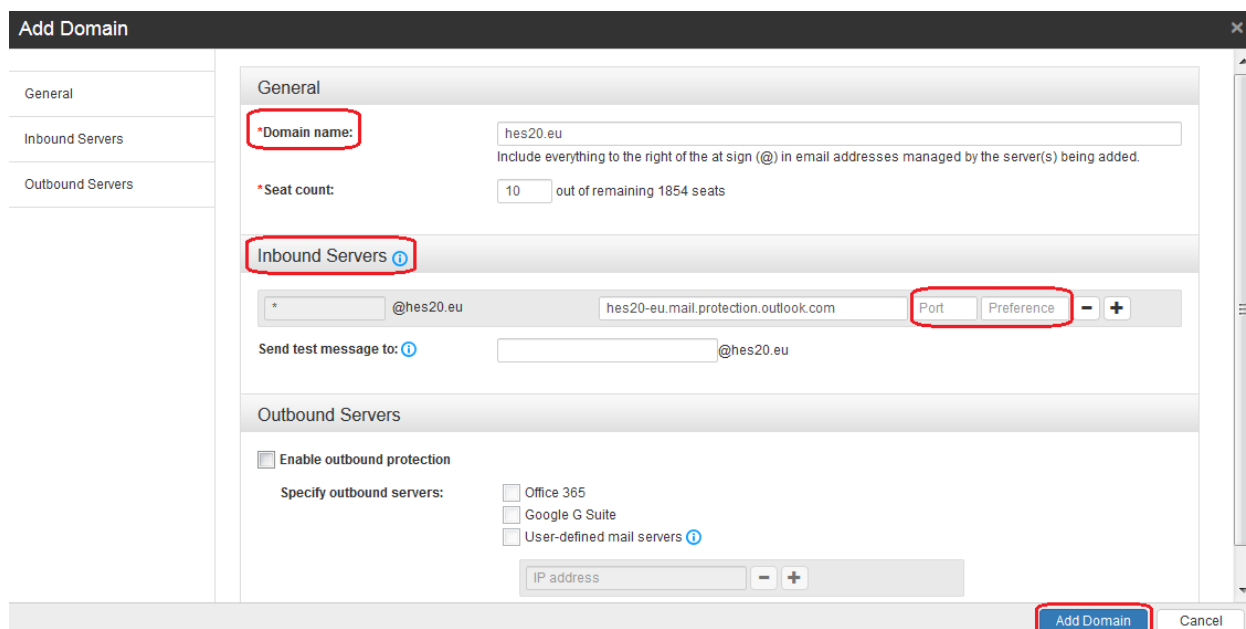
The following DNS records must be configured at your DNS hosting provider. The records that you configure depend on the domain purpose that you set.

[View DNS records](#) ▲

Need help adding these records? See [step-by-step instructions](#) for creating DNS records at popular DNS hosting providers.

Exchange Online

TYPE	PRIORITY	HOST NAME	POINTS TO ADDRESS	TTL
MX	0	@	trendenablement-com.mail.protection.outlook.com	1 Hour
CNAME	-	autodiscover	autodiscover.outlook.com	1 Hour



Add Domain

General

*Domain name: hes20.eu
Include everything to the right of the at sign (@) in email addresses managed by the server(s) being added.

*Seat count: 10 out of remaining 1854 seats

Inbound Servers

		Port	Preference
*	@hes20.eu	hes20-eu.mail.protection.outlook.com	587

Send test message to: @hes20.eu

Outbound Servers

☒ Enable outbound protection

Specify outbound servers:

- ☒ Office 365
- ☐ Google G Suite
- ☐ User-defined mail servers

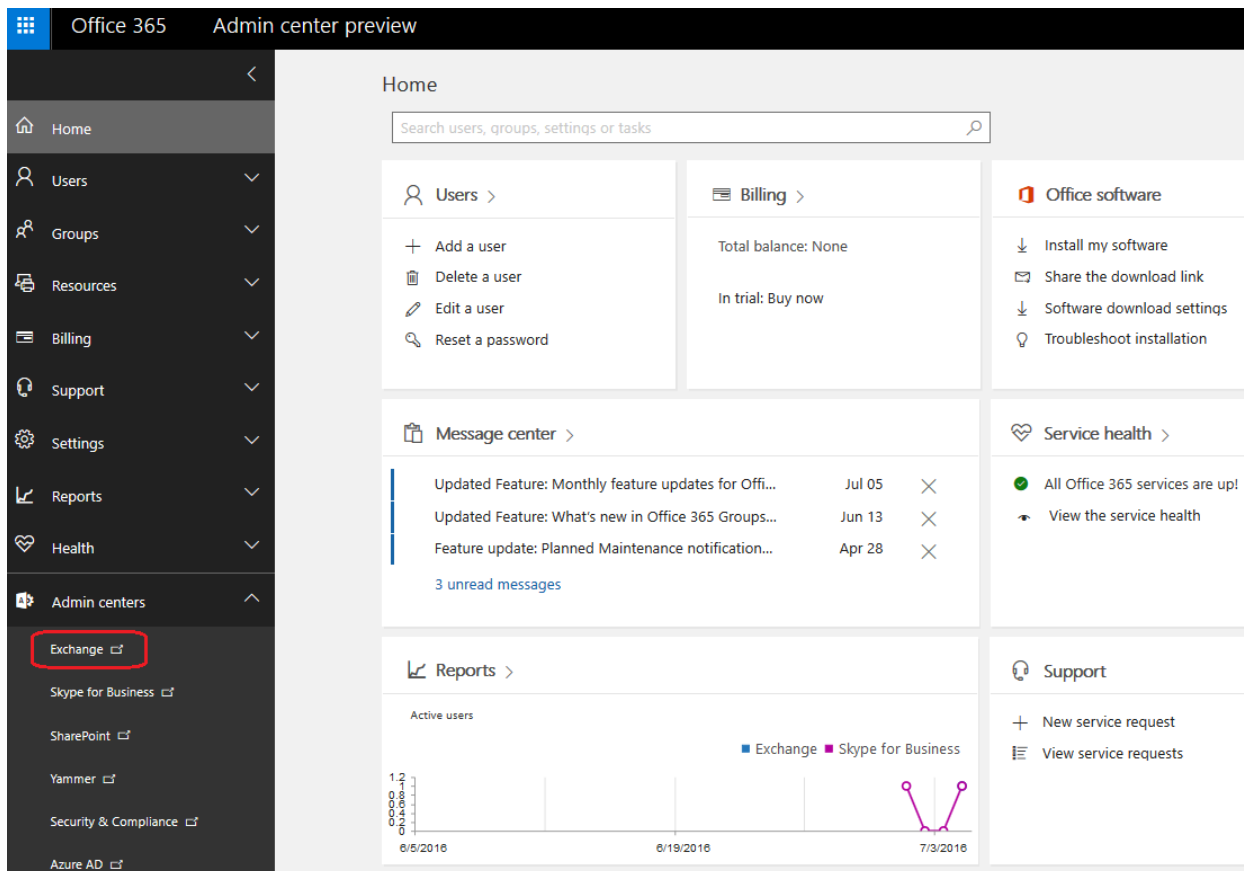
IP address

Add Domain Cancel

Configuring Microsoft Office 365 Settings

1. Log into your Microsoft Office 365 administrator center account

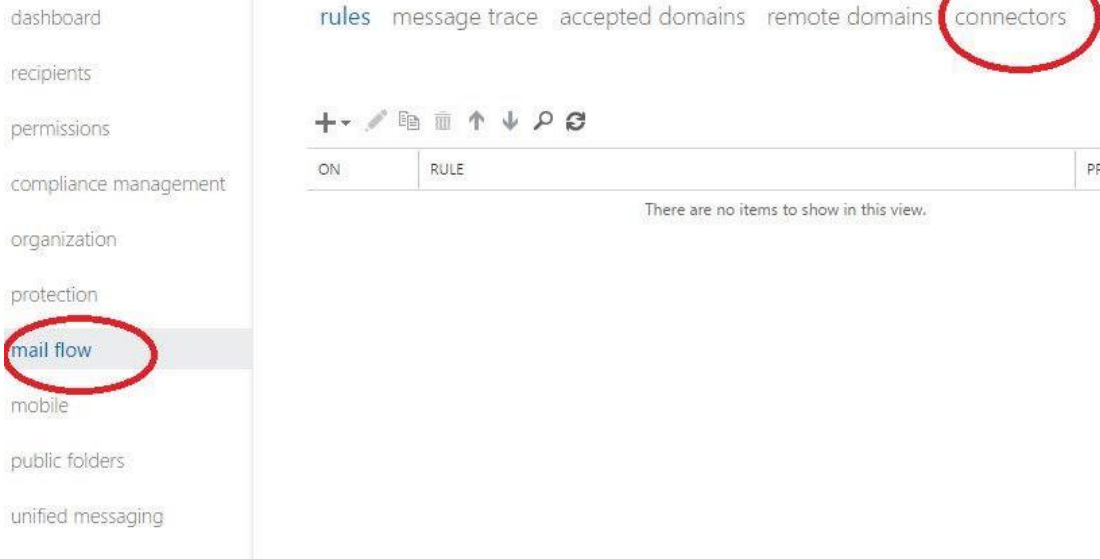
- a. Click on **ADMIN** from navigation menu
- b. Then **Exchange** under **Admin centers**
- c. Then **mail flow** from left navigation
- d. Then **connectors** from top navigation menu



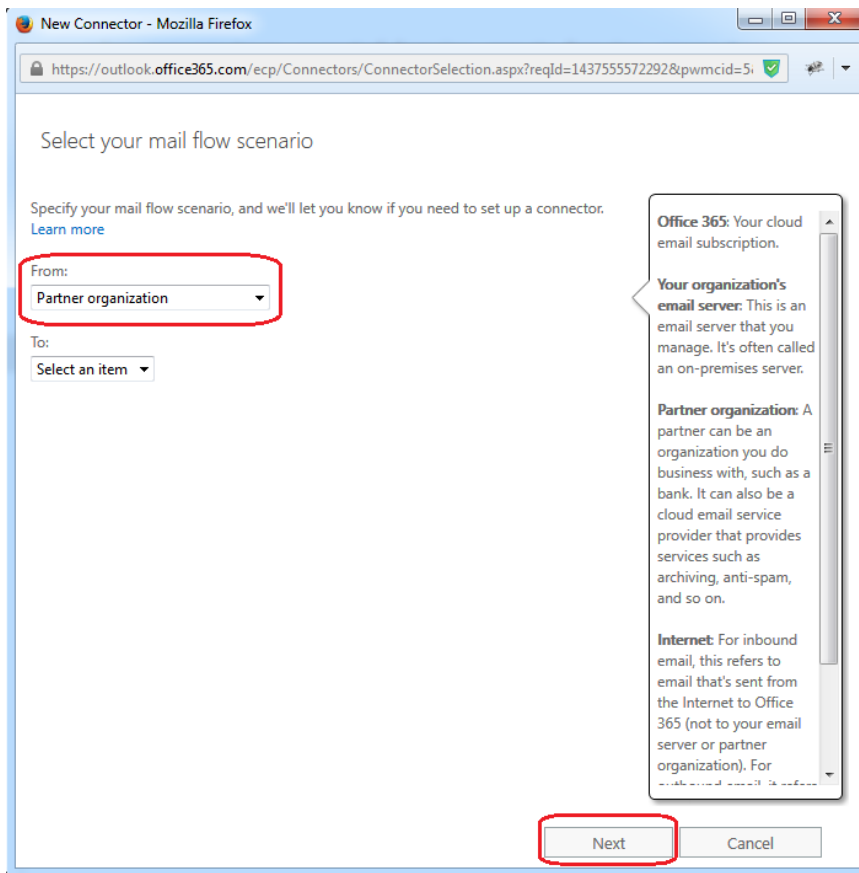
The screenshot displays the Office 365 Admin center interface. On the left, the navigation menu is visible with 'Admin centers' expanded and 'Exchange' selected. The main content area shows the 'Home' dashboard with the following sections:

- Users >**
 - Add a user
 - Delete a user
 - Edit a user
 - Reset a password
- Billing >**
 - Total balance: None
 - In trial: Buy now
- Office software**
 - Install my software
 - Share the download link
 - Software download settings
 - Troubleshoot installation
- Message center >**
 - Updated Feature: Monthly feature updates for Offi... (Jul 05)
 - Updated Feature: What's new in Office 365 Groups... (Jun 13)
 - Feature update: Planned Maintenance notification... (Apr 28)
 - 3 unread messages
- Service health >**
 - All Office 365 services are up!
 - View the service health
- Reports >**
 - Active users
 - Line chart showing Exchange (blue) and Skype for Business (purple) active users from 6/5/2016 to 7/3/2016.
- Support**
 - New service request
 - View service requests

Exchange admin center



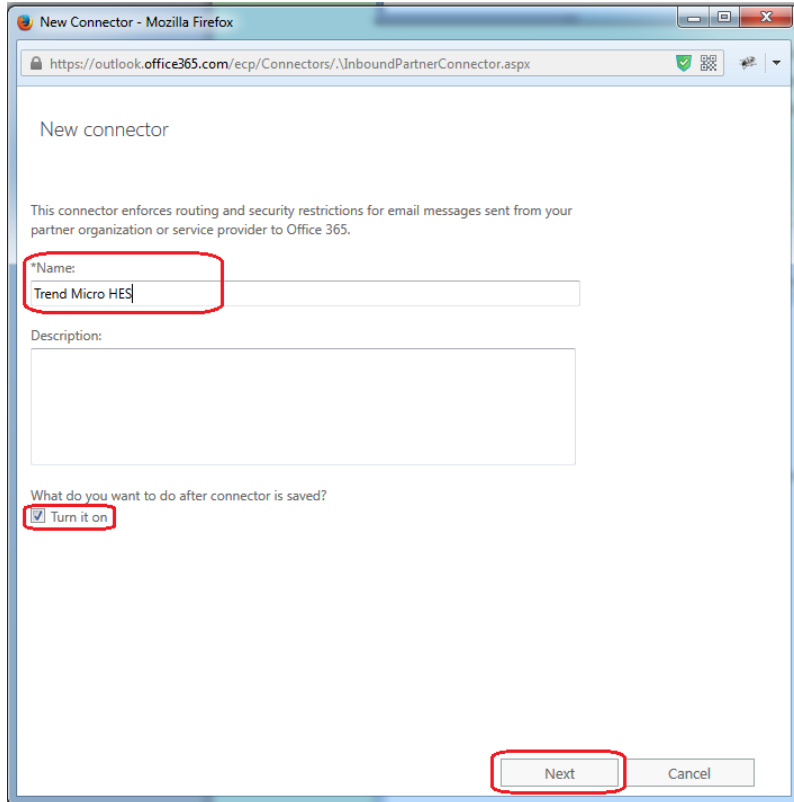
2. Add an Inbound Connector.



3. Connectors are where you will add the information about the inbound HES server.

a. Be sure to define the Connector name and the domains you want to accept.

4. In the **Name** field, enter a descriptive name for the inbound connector.



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/\InboundPartnerConnector.aspx

New connector

This connector enforces routing and security restrictions for email messages sent from your partner organization or service provider to Office 365.

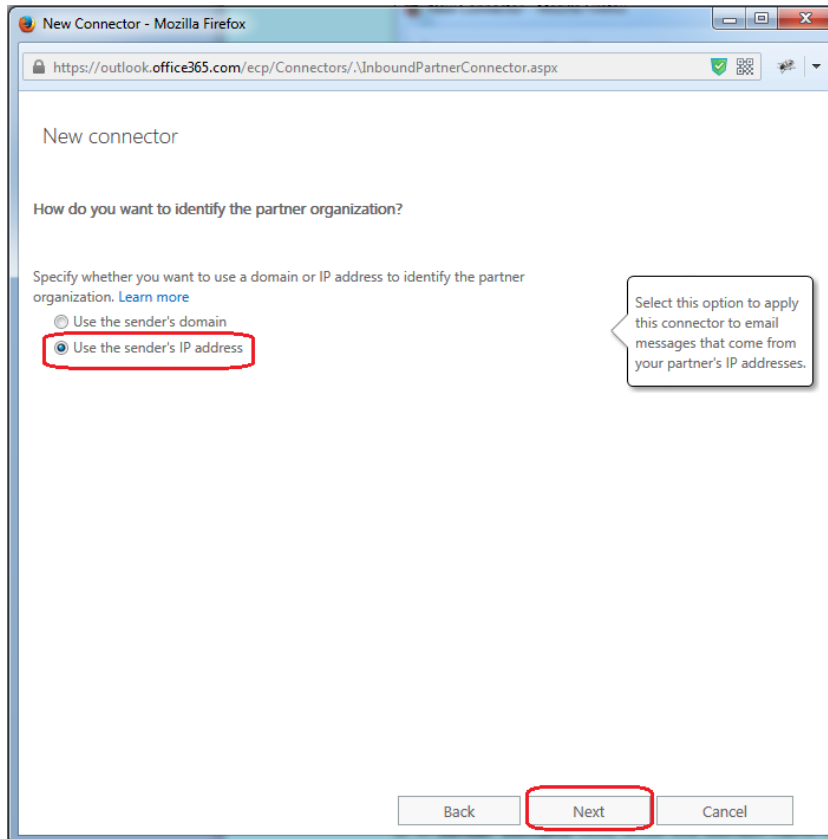
*Name:
Trend Micro HES

Description:

What do you want to do after connector is saved?
☒ Turn it on

Next Cancel

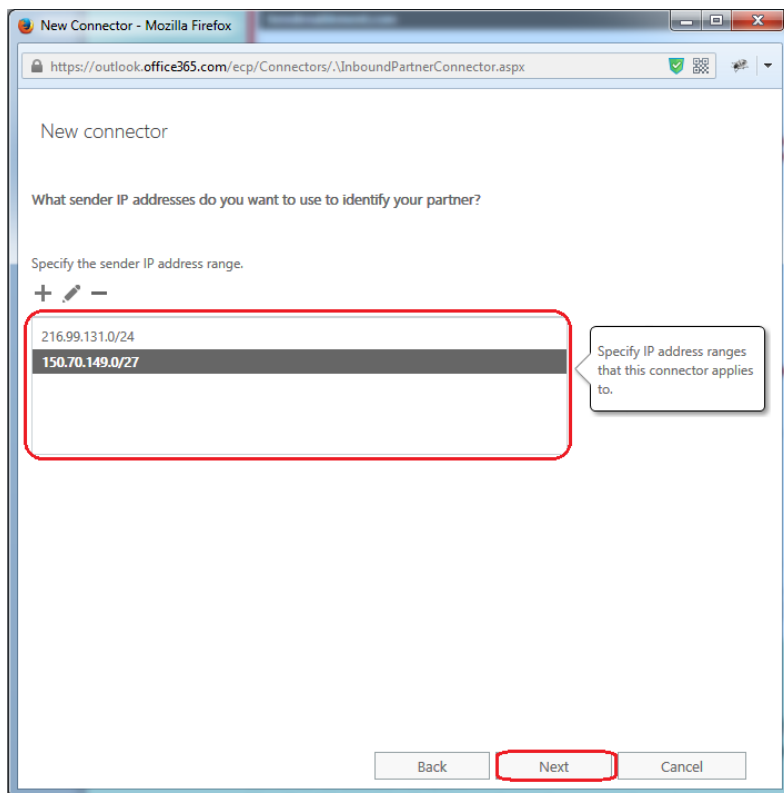
5. Choose: Use the sender's IP address



6. In **Specify the sender IP addresses range** field, enter the IP address or addresses for the organization you want to add to the safe list. This will be the IP address of the HES Server. This information is available in the welcome email (not the license registration email) or available in this support article: <http://esupport.trendmicro.com/solution/en-us/1055066.aspx>.

NOTE: You may have Office 365 only accepts rr in range of 24 to 32 (nnn.nnn.nnn.nnn/rr), please modify the rr from HES instructions to the closest Office 365 allows you to set. For example: 216.104.0.0/19 you can enter as 216.104.0.0/24.

The IP addresses in the screenshots above may be subject to change without notice, ***always use information from the welcome email or support article as primary source.***



New connector

What sender IP addresses do you want to use to identify your partner?

Specify the sender IP address range.

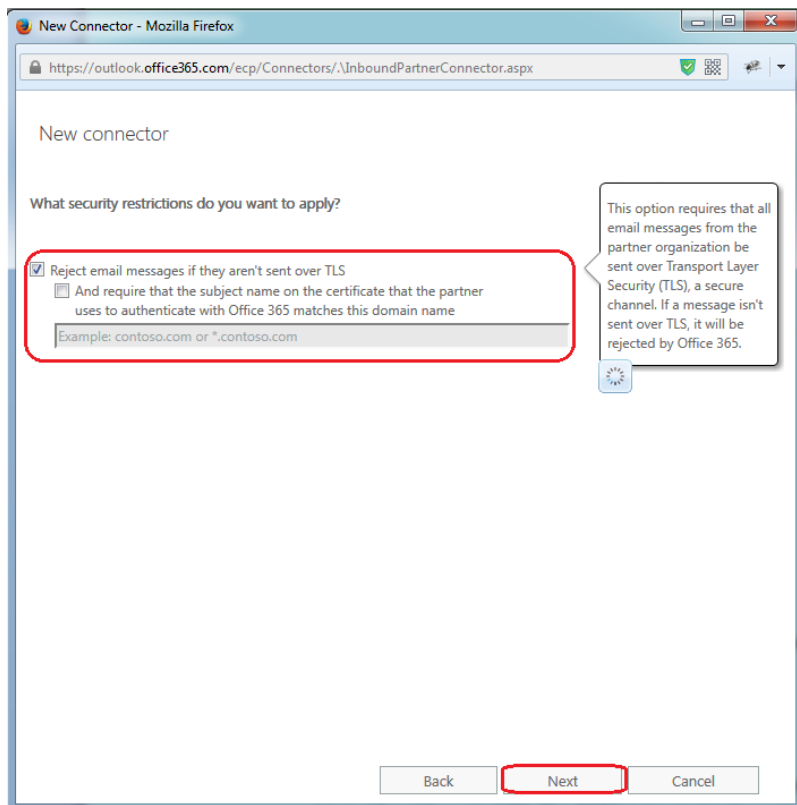
+ -

216.99.131.0/24
150.70.149.0/27

Specify IP address ranges that this connector applies to.

Back Next Cancel

7. Choose the security restrictions you want:



New connector

What security restrictions do you want to apply?

☒ Reject email messages if they aren't sent over TLS

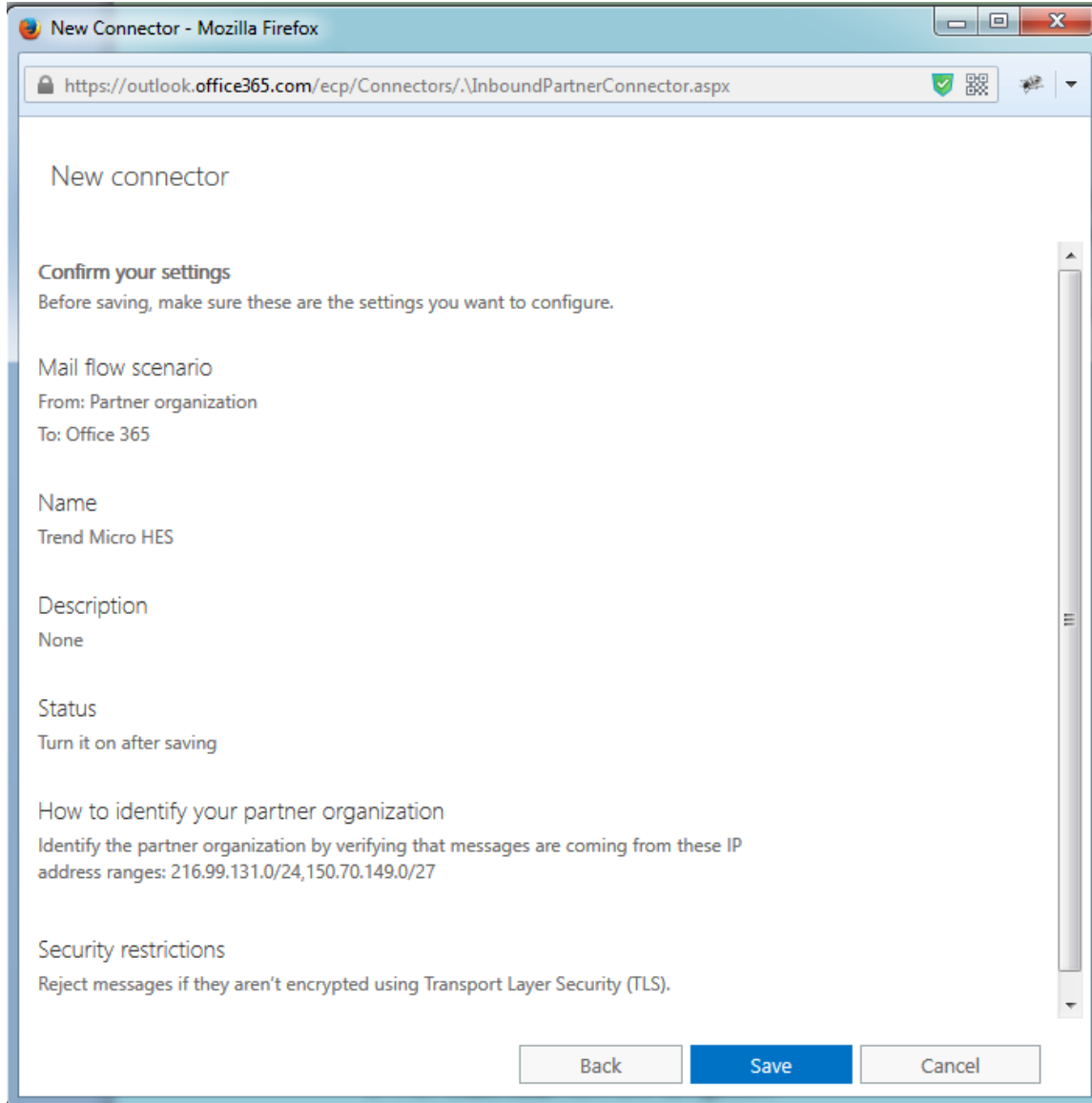
☐ And require that the subject name on the certificate that the partner uses to authenticate with Office 365 matches this domain name

Example: contoso.com or *.contoso.com

This option requires that all email messages from the partner organization be sent over Transport Layer Security (TLS), a secure channel. If a message isn't sent over TLS, it will be rejected by Office 365.

Back Next Cancel

8. Click **save**.



Point the MX record of your domain to Trend Micro HES

Important! This step should be performed last to guarantee mail flow.

The MX record or Mail Exchange record is the IP address or domain name that will be receiving your mail. This has to be the first destination of the email. In this case, it must be the public IP address of the HES server. This address must be configured through your ISP or domain registrar:

1. Lower the TTL of the MX record to help increase delivery reliability
2. Migrate MX record to new HES IP address

Add an email flow rule to bypass spam filtering

Turn off spam filtering in Exchange Online and use Hosted Email Security only

1. Log into your Microsoft Office 365.
2. Go to Exchange admin center page (select **Admin centers** | **Exchange** from title bar).
3. Click **mail flow** from left navigation, select **rules**.
4. Select “**Bypass spam filtering**” from pull-down menu.
5. In the **Rule** window, complete the required fields.
 - a. Name: Turn off spam filter in Office 365.
 - b. Apply this rule if
 - i. Select **The sender...** | IP address is in any of these ranges or exactly matches.
 - ii. In the **Specify IP address ranges** window, enter the same IP addresses from step 6 of INBOUND MAIL SETUP section above.
 - iii. Click the add icon for each range.
 - iv. Click **ok**.
 - c. Do the following: **Set the spam confidence level (SCL) to... - Bypass spam filtering**
 - d. Except if: **Do not add an exception**
 - e. Audit this rule with severity level: **Not specified**
 - f. Choose a mode for this rule: **Enforce**
6. Click **Save**.

Add an email flow rule to lock down Exchange Online

This accepts only emails from Hosted Email Security to ensure spammers cannot bypass.

1. Log into your Microsoft Office 365.
2. Go to Exchange admin center page (select **Admin centers** | **Exchange** from title bar).

3. Click **mail flow** from left navigation, select **rules**.
4. Select “**Restrict messages by sender or recipient ...**” from pull-down menu.
 - a. Name: “Only accept inbound mail from HES”
 - b. Apply this rule if
 - i. Select **The sender is located**.
 - ii. In the select **sender location** window, select **Outside the organization**
 - iii. Click **ok**
 - c. Do the following: **Delete the message without notifying anyone**
 - d. Audit this rule with severity level: **Not specified**
 - e. Choose a mode for this rule: **Enforce**
5. In the **Rule** window, complete the required fields.
6. Add an exception to the allow email flow from Hosted Email Security
 - a. Click **More options**
 - b. Under **Except if**, click **add exception**
 - c. Select **The sender... | IP address is in any of these ranges or exactly matches**.
 - d. In the **Specify IP address ranges** window, enter the same IP addresses from step 6 of INBOUND EMAIL SETUP section above.
 - e. Click the add icon for each range
 - f. Click **ok**
7. Click **save**.

Disable SPF hard fail check

This accepts the emails from Hosted Email Security, which may fail SPF check.

1. Log into your Microsoft Office 365.
2. Go to Exchange admin center page (select **Admin centers** | **Exchange** from title bar).

3. Click **protection** from left navigation, select **spam filter**.
4. Change the advanced options of your spam policy
 - a. Click the spam policy to open it
 - b. Choose **advanced options** from the left navigation
 - c. Find **SPF record: hard fail** and choose **Off** for this option

Default

general

spam and bulk actions

block lists

allow lists

international spam

▶ **advanced options**

Specify whether to mark messages that include these properties as spam.

Empty messages:

Off ▼

JavaScript or VBScript in HTML:

Off ▼

Frame or IFrame tags in HTML:

Off ▼

Object tags in HTML:

Off ▼

Embed tags in HTML:

Off ▼

Form tags in HTML:

Off ▼

Web bugs in HTML:

Off ▼

Apply sensitive word list:

Off ▼

SPF record: hard fail:

Off ▼

Conditional Sender ID filtering: hard fail:

Off ▼

NDR backscatter:

Off ▼

Save

Cancel

- d. Click **Save** for this setting

OUTBOUND EMAIL SET UP

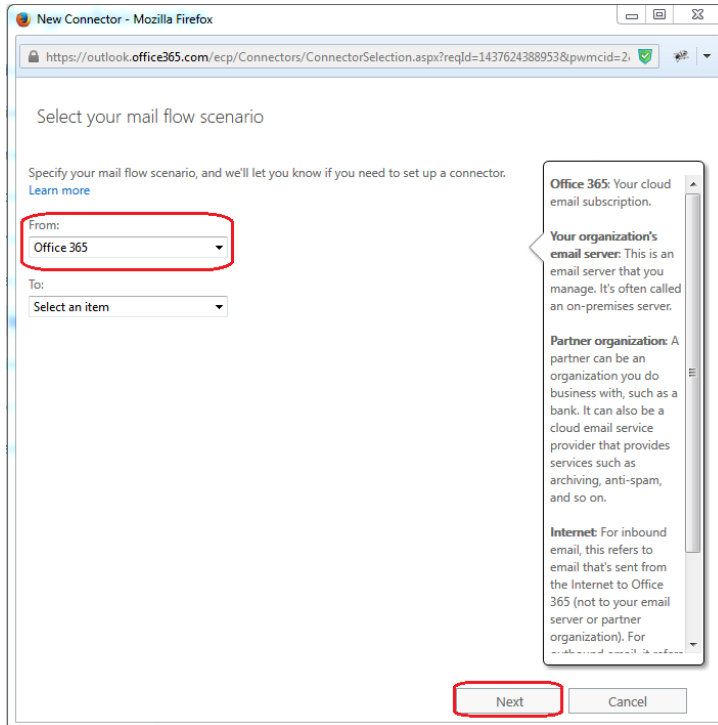
Configure your Hosted Email Security Settings

1. Configure the corresponding outbound settings in Trend Micro HES to route emails sent from your domain from Office 365.
 - a. Log into the HES main page
 - b. From the above column click on the following:
 - i. **Domains**
 - ii. **Special domain name**
 - c. Check the checkbox for **Enable outbound protection**
 - d. Select checkbox button for **Office 365**
 - e. Click **Save**

Configure Microsoft Office 365 Settings

1. Log into your Microsoft Office 365 administrator center account
 - a. Click on **ADMIN** from navigation menu
 - b. Then **Exchange** under **Admin centers**
 - c. Then mail flow from left navigation
 - d. Then connectors from top navigation menu

2. Add an Outbound Connector as follows:



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/ConnectorSelection.aspx?reqId=1437624388953&pwmcid=2

Select your mail flow scenario

Specify your mail flow scenario, and we'll let you know if you need to set up a connector. [Learn more](#)

From: **Office 365**

To: Select an item

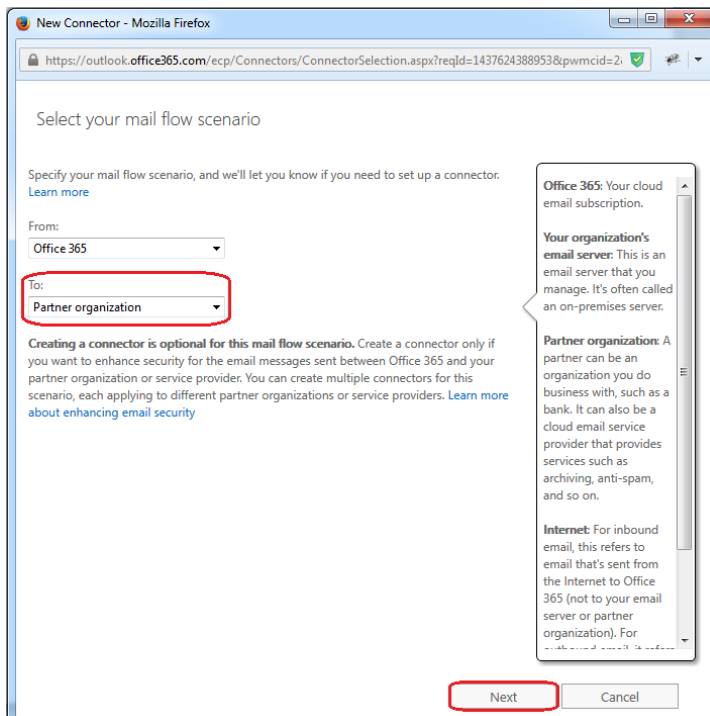
Office 365: Your cloud email subscription.

Your organization's email server: This is an email server that you manage. It's often called an on-premises server.

Partner organization: A partner can be an organization you do business with, such as a bank. It can also be a cloud email service provider that provides services such as archiving, anti-spam, and so on.

Internet: For inbound email, this refers to email that's sent from the Internet to Office 365 (not to your email server or partner organization). For

Next Cancel



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/ConnectorSelection.aspx?reqId=1437624388953&pwmcid=2

Select your mail flow scenario

Specify your mail flow scenario, and we'll let you know if you need to set up a connector. [Learn more](#)

From: Office 365

To: **Partner organization**

Creating a connector is optional for this mail flow scenario. Create a connector only if you want to enhance security for the email messages sent between Office 365 and your partner organization or service provider. You can create multiple connectors for this scenario, each applying to different partner organizations or service providers. [Learn more about enhancing email security](#)

Office 365: Your cloud email subscription.

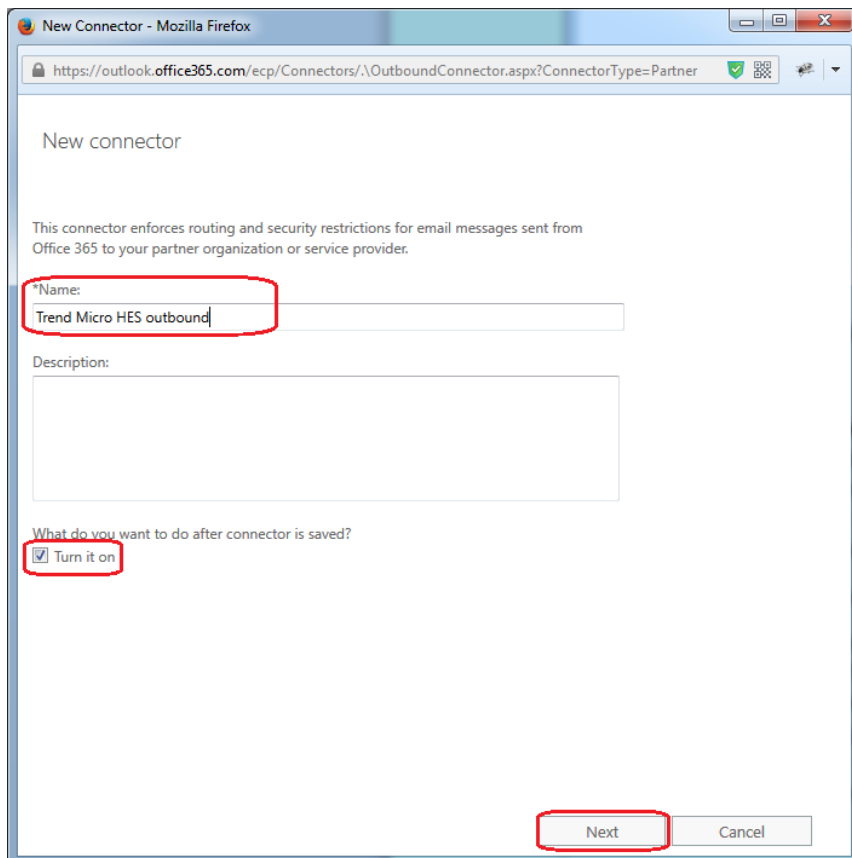
Your organization's email server: This is an email server that you manage. It's often called an on-premises server.

Partner organization: A partner can be an organization you do business with, such as a bank. It can also be a cloud email service provider that provides services such as archiving, anti-spam, and so on.

Internet: For inbound email, this refers to email that's sent from the Internet to Office 365 (not to your email server or partner organization). For

Next Cancel

3. Name your connector and add description.



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/\OutboundConnector.aspx?ConnectorType=Partner

New connector

This connector enforces routing and security restrictions for email messages sent from Office 365 to your partner organization or service provider.

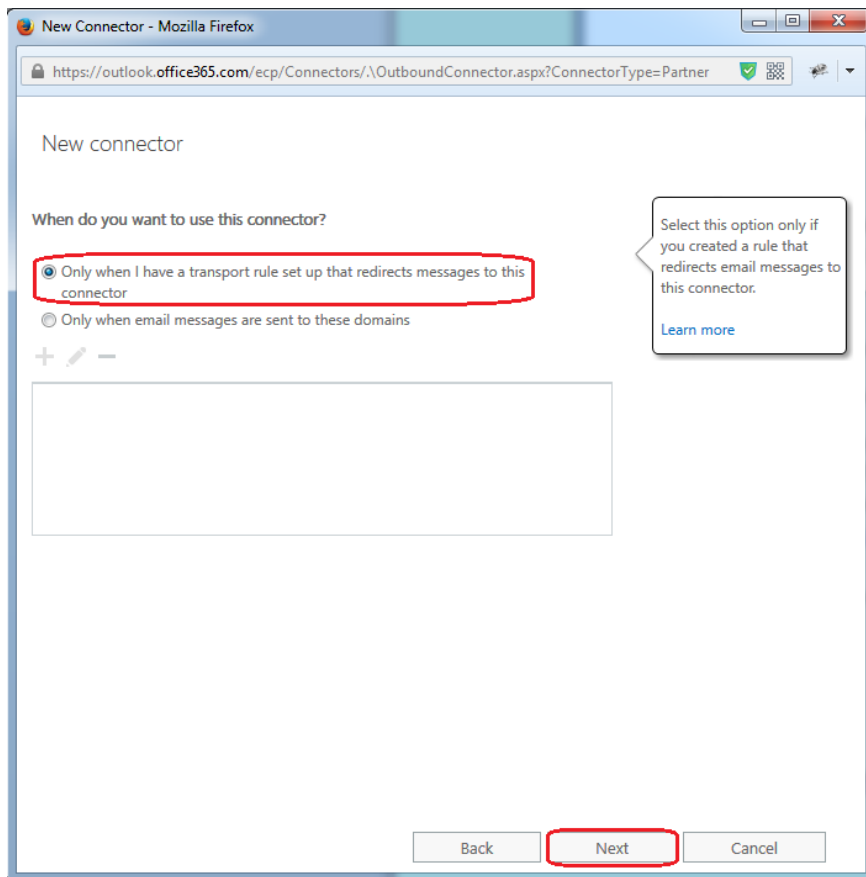
*Name:
Trend Micro HES outbound

Description:

What do you want to do after connector is saved?
☒ Turn it on

Next Cancel

4. Choose the way you want to use this connector.



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/\OutboundConnector.aspx?ConnectorType=Partner

New connector

When do you want to use this connector?

☒ Only when I have a transport rule set up that redirects messages to this connector

☐ Only when email messages are sent to these domains

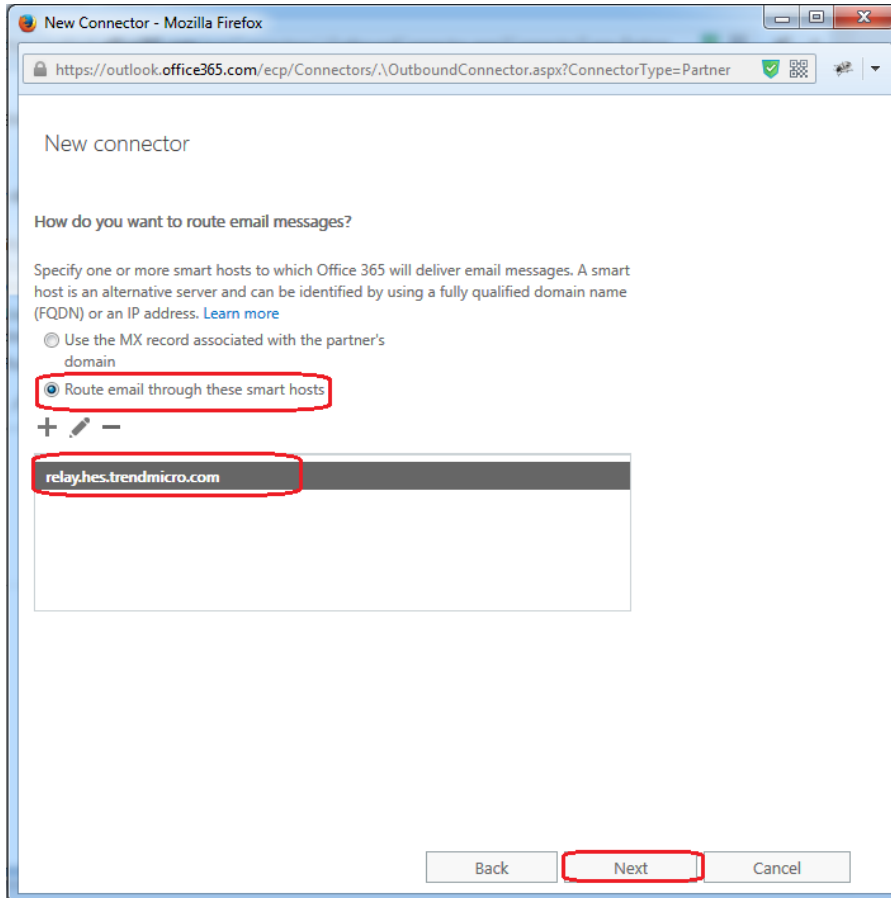
+ -

Select this option only if you created a rule that redirects email messages to this connector.

[Learn more](#)

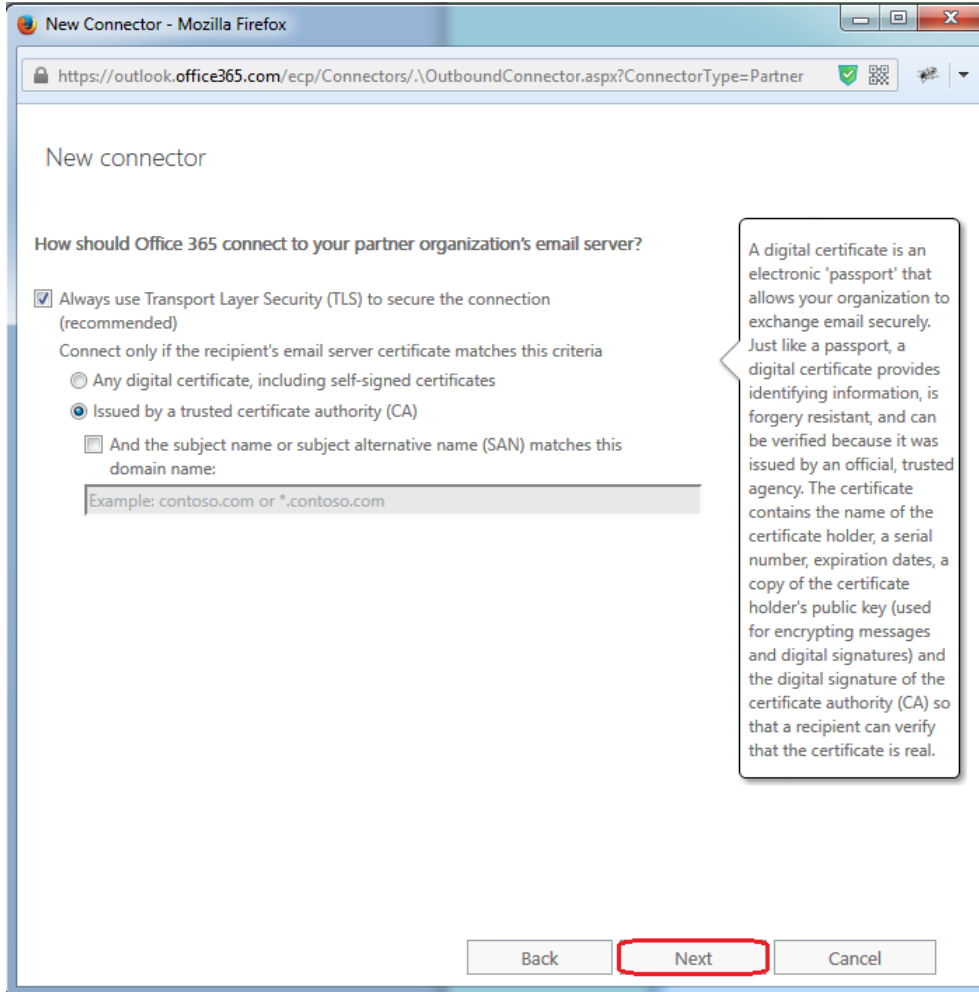
Back **Next** Cancel

5. Add HES Relay FQDN to: **Route email through these smart hosts**



- Add the fully qualified domain name (FQDN) for the purpose of relay messages to this Hosted Email Security MTA. This FQDN is located in the welcome email (sent to the administrator after you have completed Hosted Email Security activation process). (<http://docs.trendmicro.com/en-us/enterprise/hosted-email-security-administrator-guide/about-domain-managem/configuring-a-domain.aspx>)

6. Choose the way to connect to HES.



New connector

How should Office 365 connect to your partner organization's email server?

☒ Always use Transport Layer Security (TLS) to secure the connection (recommended)

Connect only if the recipient's email server certificate matches this criteria

☐ Any digital certificate, including self-signed certificates

☒ Issued by a trusted certificate authority (CA)

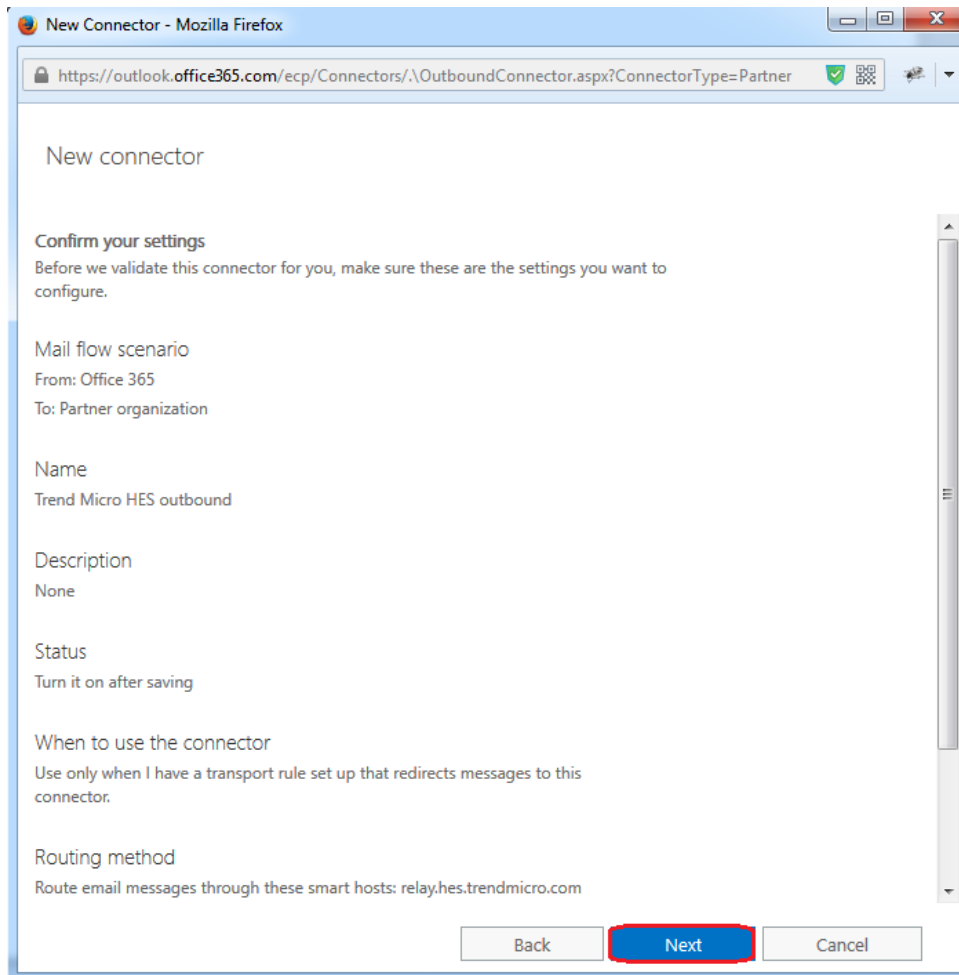
☐ And the subject name or subject alternative name (SAN) matches this domain name:

Example: contoso.com or *.contoso.com

A digital certificate is an electronic 'passport' that allows your organization to exchange email securely. Just like a passport, a digital certificate provides identifying information, is forgery resistant, and can be verified because it was issued by an official, trusted agency. The certificate contains the name of the certificate holder, a serial number, expiration dates, a copy of the certificate holder's public key (used for encrypting messages and digital signatures) and the digital signature of the certificate authority (CA) so that a recipient can verify that the certificate is real.

Back Next Cancel

7. Review your setting.



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/.OutboundConnector.aspx?ConnectorType=Partner

New connector

Confirm your settings
Before we validate this connector for you, make sure these are the settings you want to configure.

Mail flow scenario
From: Office 365
To: Partner organization

Name
Trend Micro HES outbound

Description
None

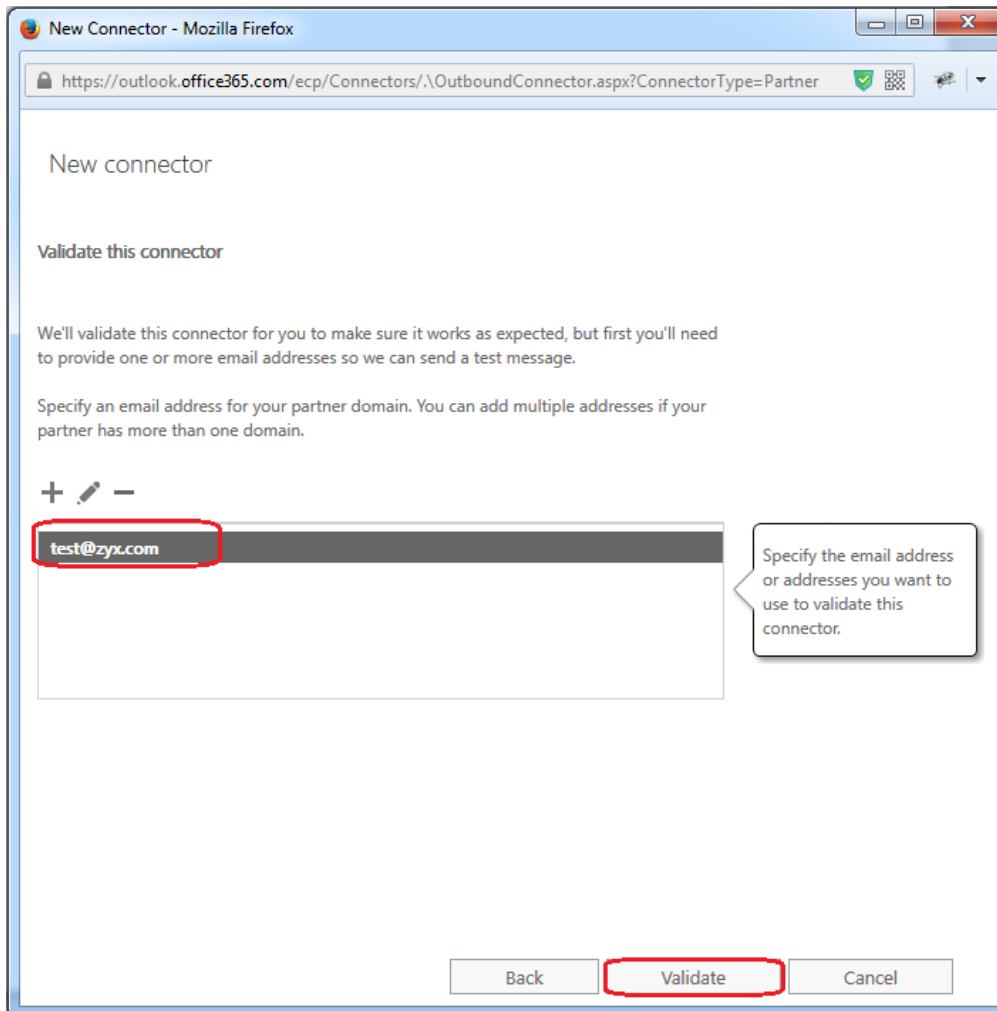
Status
Turn it on after saving

When to use the connector
Use only when I have a transport rule set up that redirects messages to this connector.

Routing method
Route email messages through these smart hosts: relay.hes.trendmicro.com

Back Next Cancel

8. Add one test email to verify this connector.



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/.\OutboundConnector.aspx?ConnectorType=Partner

New connector

Validate this connector

We'll validate this connector for you to make sure it works as expected, but first you'll need to provide one or more email addresses so we can send a test message.

Specify an email address for your partner domain. You can add multiple addresses if your partner has more than one domain.

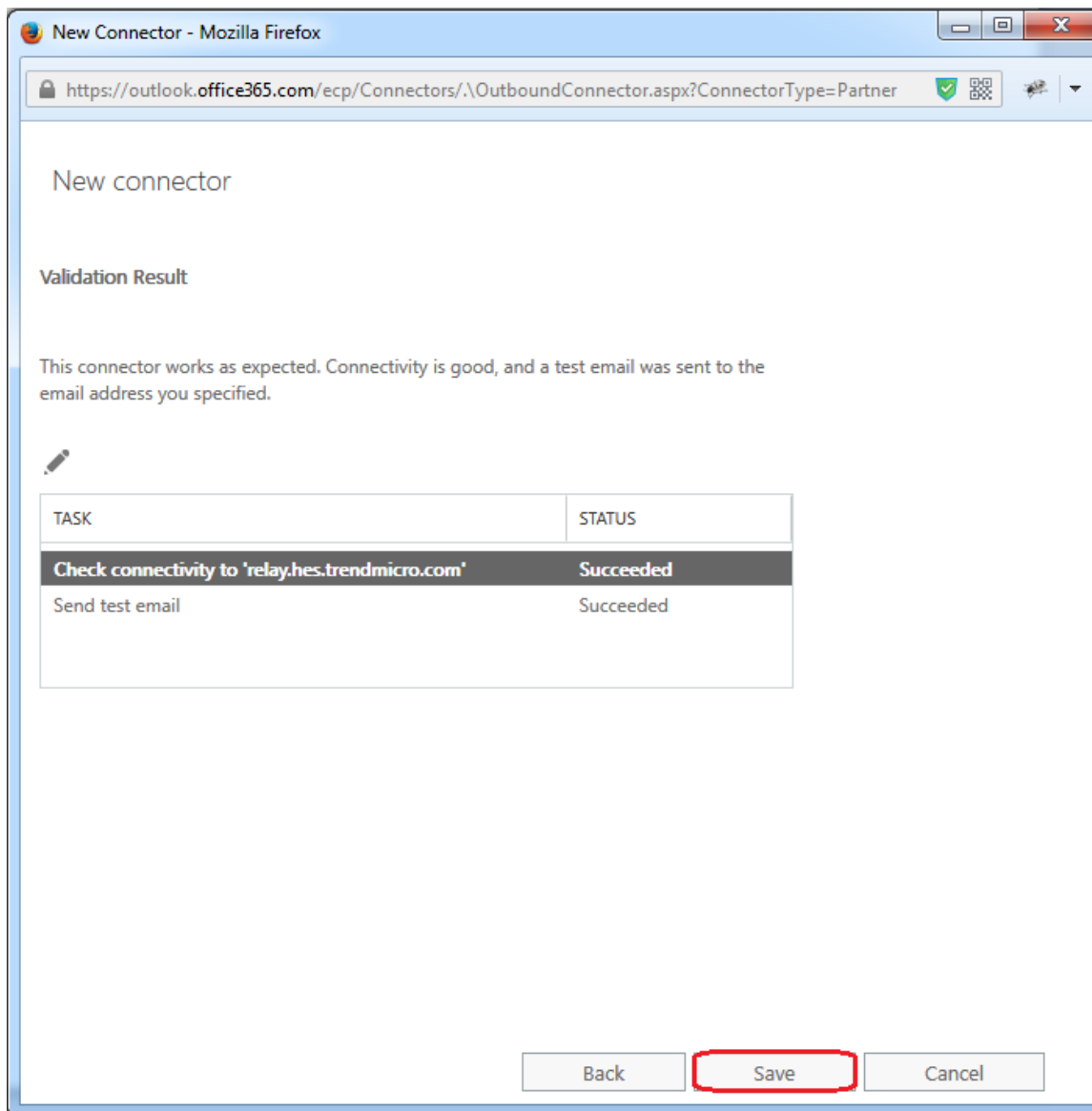
+ ✎ -

test@zpx.com

Specify the email address or addresses you want to use to validate this connector.

Back Validate Cancel

9. Validate this email address and save the connector.



New Connector - Mozilla Firefox

https://outlook.office365.com/ecp/Connectors/\OutboundConnector.aspx?ConnectorType=Partner

New connector

Validation Result

This connector works as expected. Connectivity is good, and a test email was sent to the email address you specified.

TASK	STATUS
Check connectivity to 'relay.hes.trendmicro.com'	Succeeded
Send test email	Succeeded

Back Save Cancel

Note: when you have more than one domains in your Office 365 system, the validation may not succeeded for “Send test email” part. Sometimes, it’s because that the default domain is not the one you register to HES. Choose the domain which you register to HES and enable outbound filter and make it as default domain like below:

Home > Domains

[+ Add domain](#) [+ Buy domain](#)

Domain name

- hes20.org (Default)
- cicitest.onmicrosoft.com
- hes20.eu**

H hes20.eu
Domain managed outside Office 365

[Set as default](#)
[DNS management](#)
[Check DNS](#)
[Remove](#)

Required DNS settings
Your DNS records must be set to the following values for your Office 365 services to run smoothly.

^ Exchange Online

Type	Priority	Host name	Points to address or value	TTL
MX	0	@	hes20-eu.mail.protection.outlook.com	1 Hour
TXT	-	@	v=spf1 include:spf.protection.outlook.com -all	1 Hour
CNAME	-	autodiscover	autodiscover.outlook.com	1 Hour

Home > Domains

[+ Add domain](#) [+ Buy domain](#)

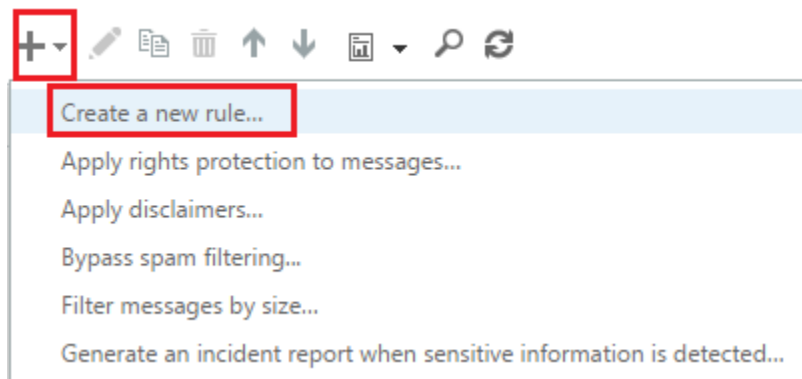
Domain name	Status
hes20.eu (Default)	Setup complete
cicitest.onmicrosoft.com	Setup complete
hes20.org	Setup in progress

After that, try to set your collector again.

10. Click **save**.

Add an email flow rule to use the HES Outbound connector

1. Log into your Microsoft Office 365.
2. Go to Exchange admin center page (select **Admin centers** | **Exchange** from title bar).
3. Click **mail flow** from left navigation, select **rules**.
4. Click “+” sign and “create a new rule”

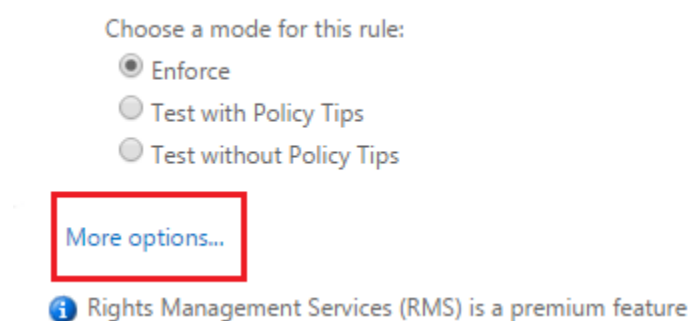


a. Complete the following fields:

i. Name: HES Outbound

ii. Apply this rule if:

1. Select “**The recipient is located**”, a new pop out console will show.
2. Select “**Outside the organization**” click **ok**.
3. Click “**More Options**” to show more conditions



iii. Do the following:

1. In the dropdown menu, mouse over to **“Redirect message to”** and then select **“the following connector.”**
2. Select the outbound connector you created for HES.

iv. Choose Mode:

1. Select **“Enforce”**

v. Click **save**

Congratulations! You have completed the installation process. Office 365 is now secured by Trend Micro Hosted Email Security.

Trend Micro Incorporated is a pioneer in secure content and threat management. Founded in 1988, Trend Micro provides individuals and organizations of all sizes with award-winning security software, hardware and services. With headquarters in Tokyo and operations in more than 30 countries, Trend Micro solutions are sold through corporate and value-added resellers and service providers worldwide. For additional information and evaluation copies of Trend Micro products and services, visit our Web site at www.trendmicro.com.

TREND MICRO INC.
U.S. toll free: +1 800.228.5651
phone: +1 408.257.1500
fax: +1408.257.2003

©2017 by Trend Micro Incorporated. All rights reserved. Trend Micro, the Trend Micro t-ball logo, and Smart Protection Network are trademarks or registered trademarks of Trend Micro Incorporated. All other company and/or product names may be trademarks or registered trademarks of their owners. Information contained in this document is subject to change without notice.