

How to Configure Envelope (SMTP) Journaling for Microsoft Exchange Server 2013 and Newer - Premium Journaling

<https://campus.barracuda.com/doc/18449662/>

This article refers to [Barracuda Message Archiver Legacy Release](#) firmware or higher, and a Microsoft Exchange Server 2013, 2016, or 2019 environment utilizing Premium Journaling with a Journal Rule and Exchange Enterprise Client Access Licenses (CALs).

If your Exchange environment *does not support* Premium Journaling, see the article [How to Configure Envelope \(SMTP\) Journaling for Microsoft Exchange Server 2013 and Newer - Standard Journaling](#).

Microsoft Exchange allows a Journal recipient to be either a *mailbox* or *contact*. By using a contact with an email address that is part of a non-existent domain, you can create a send connector that uses SMTP to deliver journaled mail to the Barracuda Message Archiver. Also see [Understanding SMTP Forwarding and Trusted Servers](#).

Excluding Health Monitor Alerts

By default, Health Monitor Alerts are automatically journaled in Exchange 2013. To exclude these alerts from journaling, refer to the Microsoft support article [Managed Availability messages are journaled in Exchange Server 2013](#).

Use the examples included in this article to simplify troubleshooting. Note that you can cut and paste the shell commands directly from this article.

Step 1. Register Each Exchange Server as a Trusted SMTP Server

To ensure that archiving begins as soon as your Exchange Servers are configured to send journal copies, first register each Exchange Server that is in a Client Access Server (CAS) role as a Trusted SMTP Server with the Barracuda Message Archiver on the **Mail Sources > SMTP** page in the web interface.

1. Log into the Barracuda Message Archiver web interface, and go to the **Mail Sources > SMTP** page.
2. In the **Trusted SMTP Servers** section, enter the details for each Exchange Server that is to journal directly to the Barracuda Message Archiver; click **Add** after entering the details for each Exchange Server, and then click **Save**.

Step 2. Create a Remote Domain From the Exchange Management PowerShell

The Remote Domain must *not* be your normal email domain. The remote domain must be a non-existent and non-routable/unresolvable domain from either inside or outside your organization (such as bma.int). This domain must be used for the email address of the Mail Contact that is to be the journaled message recipient.

Remote Domain

In previous versions of Exchange Server, the Exchange Management Console was used to create a Remote Domain; in Exchange Server 2013 the ECP/EAC has no analogous functionality so you must use PowerShell to create the Remote Domain.

To create a Remote Domain, you must enter a **Name** to describe the domain, and the actual **Domain Name** to use. In this example, bma.int is the dummy Domain Name that is used. You can use bma.int or create your own dummy Domain Name. Note that this Domain Name is also used when creating the **Mail Contact** in *Step 4. Create a Send Connector for the Remote Domain*.

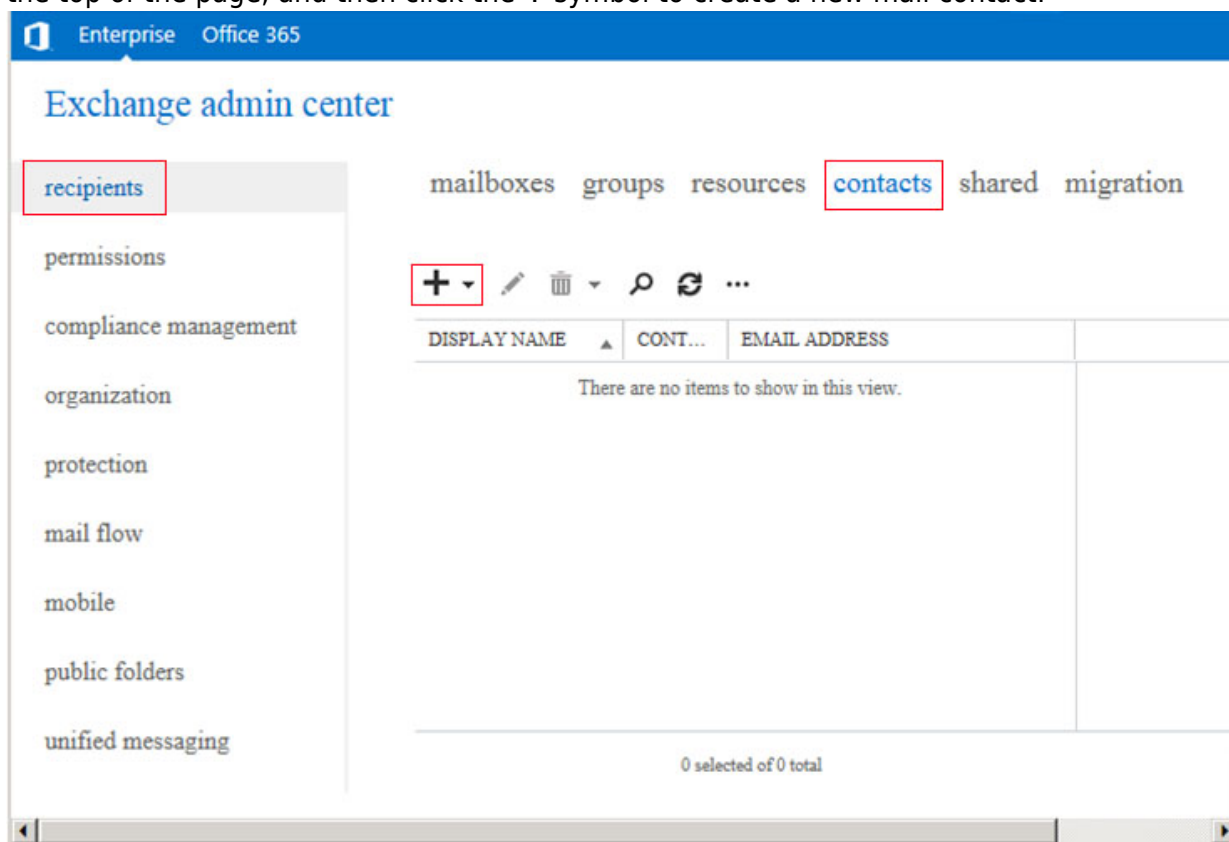
1. Open the **Exchange Management Shell**.
2. Enter the following command to create the remote domain; this command ensures TNEF encoding is disabled:
`New-RemoteDomain -DomainName bma.int -Name "Message Archiver Domain"`
3. Enter the following command to enable auto-forwarding:
`Get-RemoteDomain | Where {$_.DomainName -eq "bma.int"} | Set-RemoteDomain -TNEFEnabled $false -AutoForwardEnabled $true`
4. Enter the following command to verify the settings:
`Get-RemoteDomain | Where {$_.DomainName -eq "bma.int"} | Format-table Name, DomainName, TNEFEnabled, AutoForwardEnabled`

These commands ensure TNEF encoding is disabled and auto-forwarding is enabled. Barracuda Networks recommends disabling TNEF encoding. Auto-forwarding is enabled to allow mail for the contact to be forwarded to the Barracuda Message Archiver.

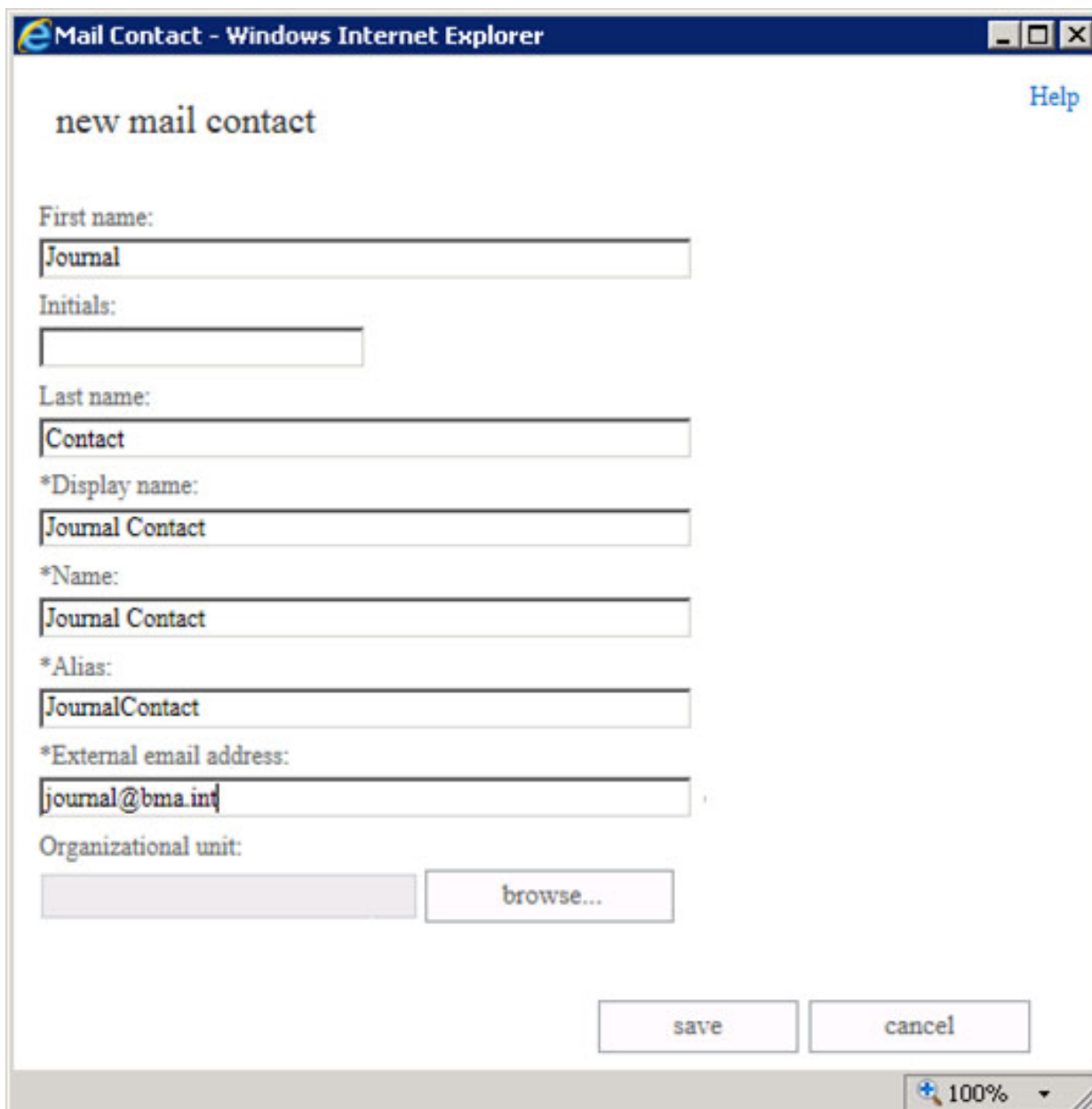
Step 3. Create a Recipient Mail Contact/Alternate Email Address

The Mail Contact is the account that is to act as a "holding location" for journaled messages. The email address associated with this account is the designated recipient and must be associated with a non-existent, non-routable dummy Domain Name created above in *Step 2. Create a Remote Domain From the Exchange Management PowerShell*. Use the following steps to create the Mail Contact:

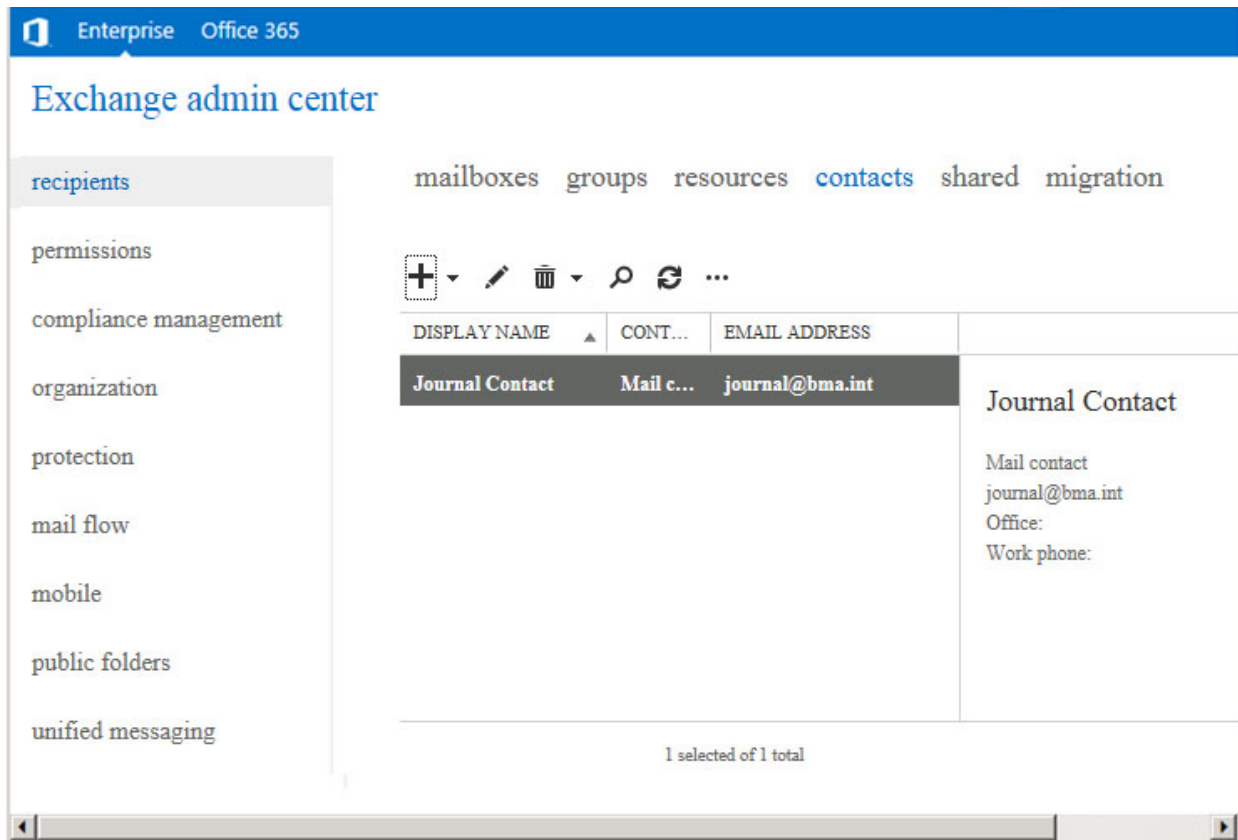
1. Log into the Exchange Admin Center (EAC), click **recipients** in the left pane, select **contacts** at the top of the page, and then click the **+** symbol to create a new mail contact:



2. In the **new mail contact** page, enter details for the designated recipient account details:



3. Click **save**. The new contact displays in the **contacts** list:



Hide Contact from Global Address List

Barracuda Networks recommends hiding the mail contact from the Global Address List (GAL). One method to hide the mail contact is to utilize the following shell command:

```
Get-MailContact | Where {$_.Name -eq "Journal Contact"} | Set-MailContact -HiddenFromAddressListsEnabled $True
```

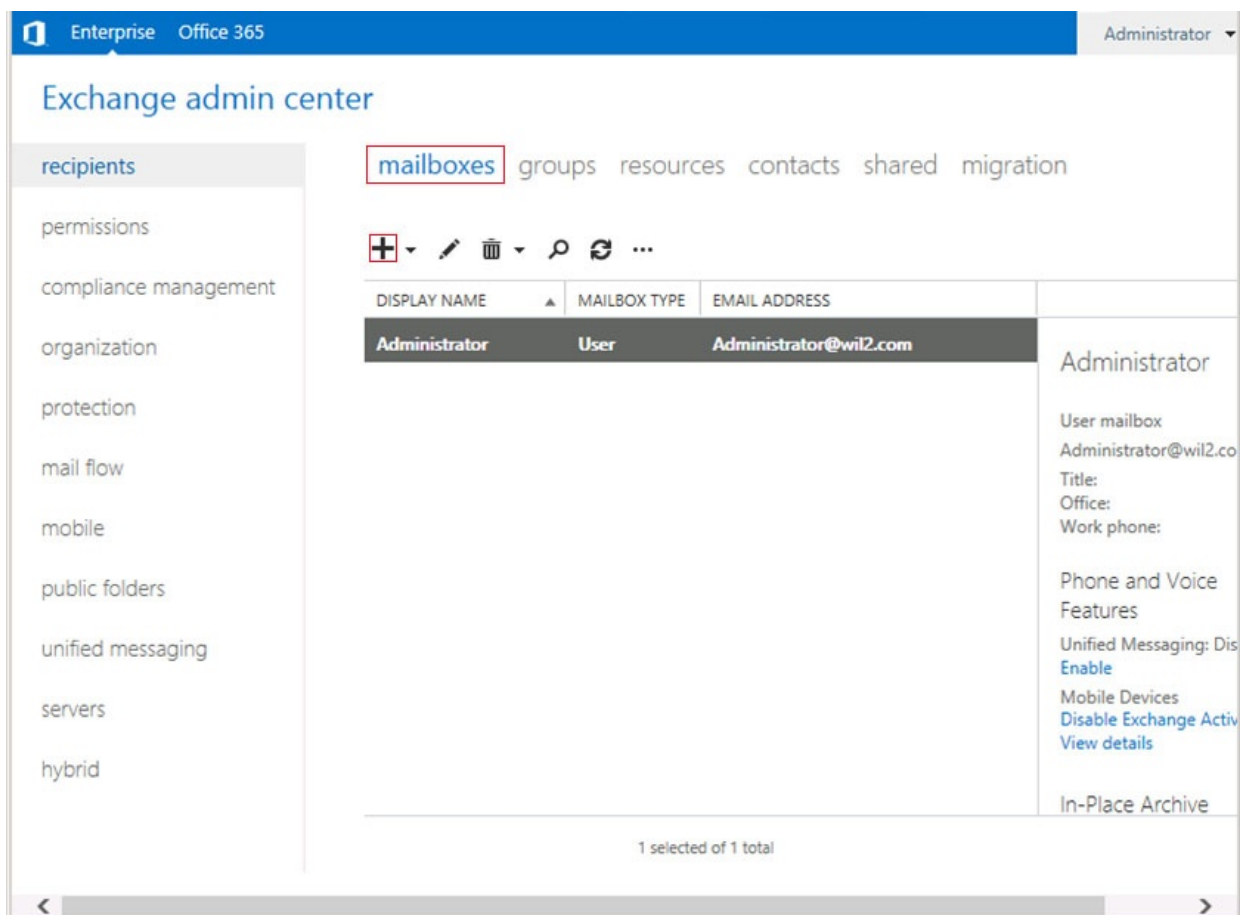
The setting can be verified by executing:

```
Get-MailContact | Where {$_.Name -eq "Journal Contact"} | Format-table Name, HiddenFromAddressListsEnabled
```

Alternate Journaling Mailbox

You can configure an additional parameter in Exchange 2013 to specify that a journal report temporarily cannot be delivered. For details, refer to the [Journal Reports](#) section of the Microsoft TechNet Journaling article.

- In the EAC, click **recipients** in the left pane, select **mailboxes** at the top of the page, and click the **+** symbol to create an alternate journaling mailbox:



Enterprise Office 365 Administrator

Exchange admin center

recipients mailboxes groups resources contacts shared migration

+ - ✎ 🗑️ 🔍 ↺ ...

DISPLAY NAME	MAILBOX TYPE	EMAIL ADDRESS
Administrator	User	Administrator@wil2.com

Administrator

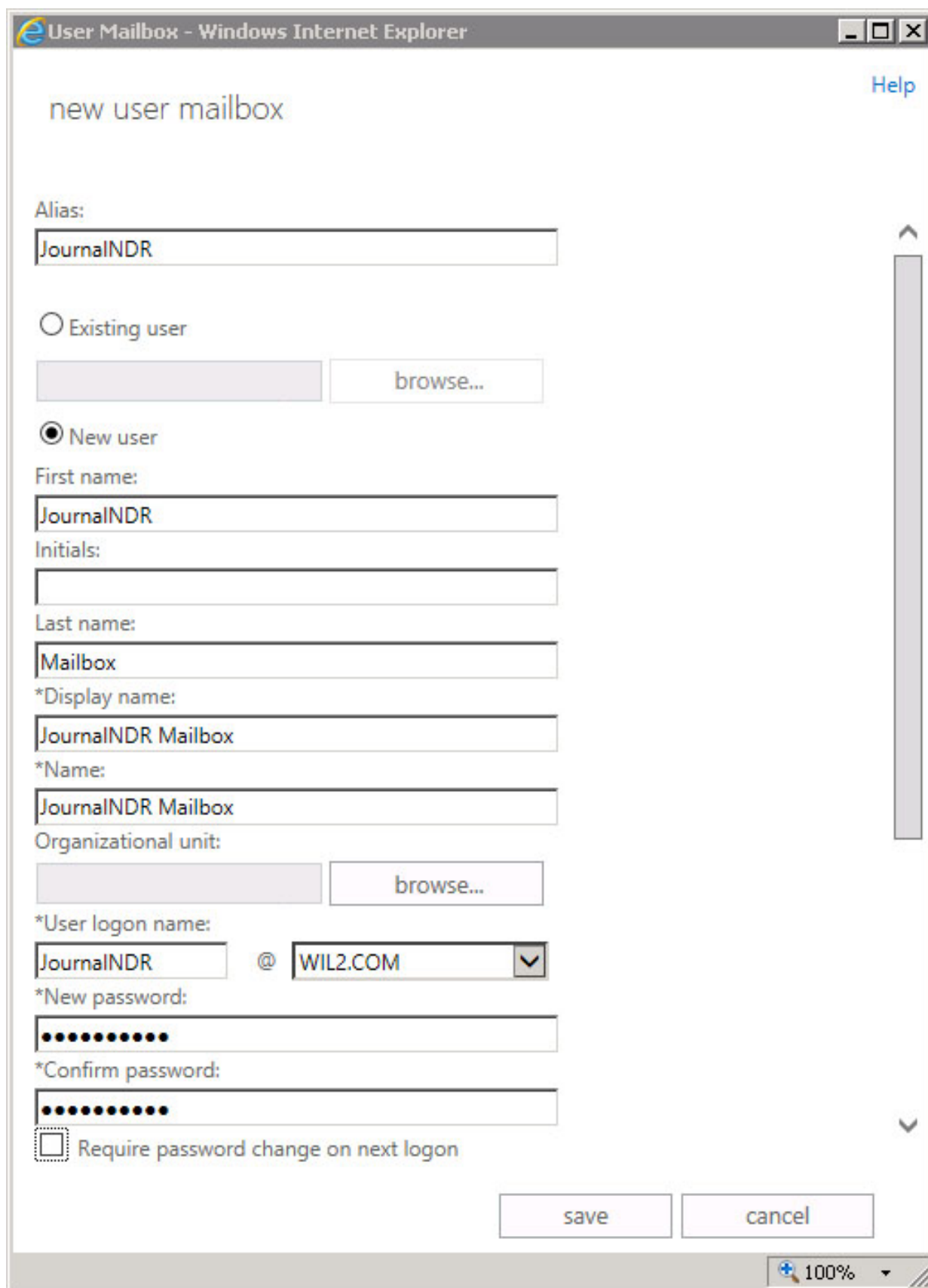
User mailbox
Administrator@wil2.co
Title:
Office:
Work phone:

Phone and Voice
Features
Unified Messaging: Dis
[Enable](#)
Mobile Devices
[Disable Exchange Activ](#)
[View details](#)

In-Place Archive

1 selected of 1 total

5. In the **new user mailbox** page, enter details for the alternate journaling mailbox:



User Mailbox - Windows Internet Explorer

new user mailbox [Help](#)

Alias:

☐ Existing user

☒ New user

First name:

Initials:

Last name:

*Display name:

*Name:

Organizational unit:

*User logon name:
 @

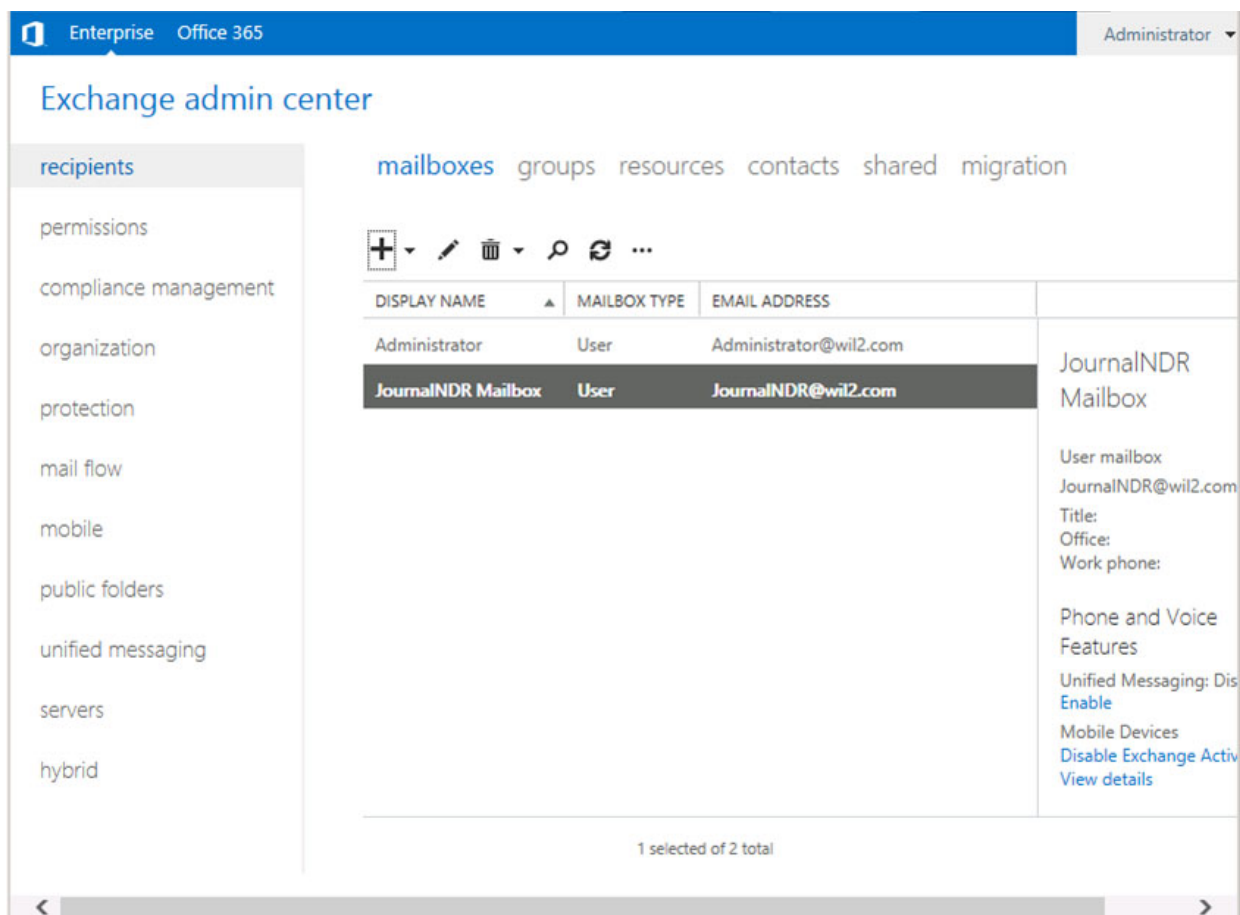
*New password:

*Confirm password:

☐ Require password change on next login

100%

6. Click **save**. The new mailbox displays in the **mailboxes** list:



Exchange admin center

recipients mailboxes groups resources contacts shared migration

permissions
compliance management
organization
protection
mail flow
mobile
public folders
unified messaging
servers
hybrid

DISPLAY NAME	MAILBOX TYPE	EMAIL ADDRESS
Administrator	User	Administrator@wil2.com
JournalNDR Mailbox	User	JournalNDR@wil2.com


JournalNDR Mailbox

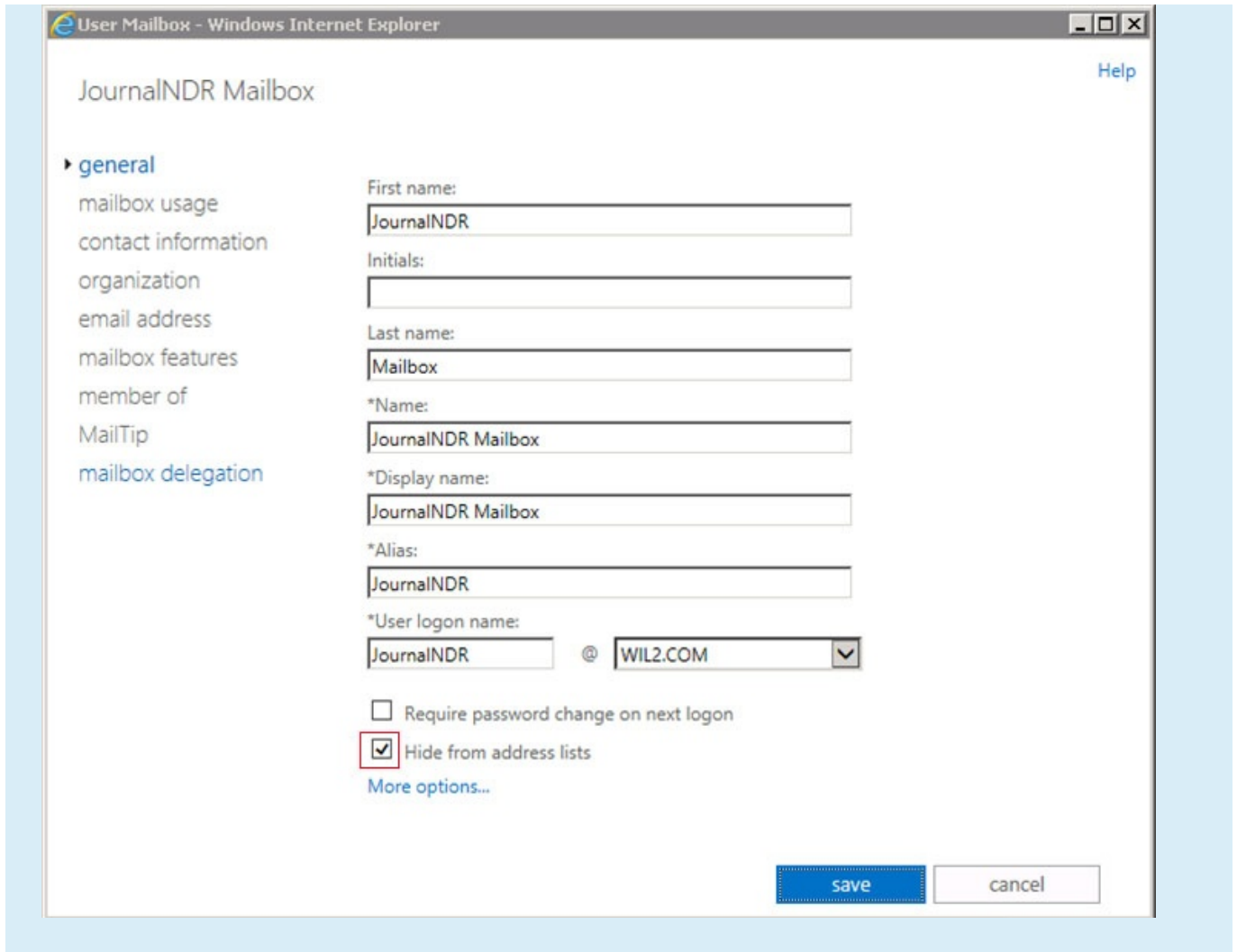
User mailbox
JournalNDR@wil2.com
Title:
Office:
Work phone:

Phone and Voice Features
Unified Messaging: Dis
[Enable](#)
Mobile Devices
[Disable Exchange Activ](#)
[View details](#)

1 selected of 2 total

Hide Alternate Contact from GAL

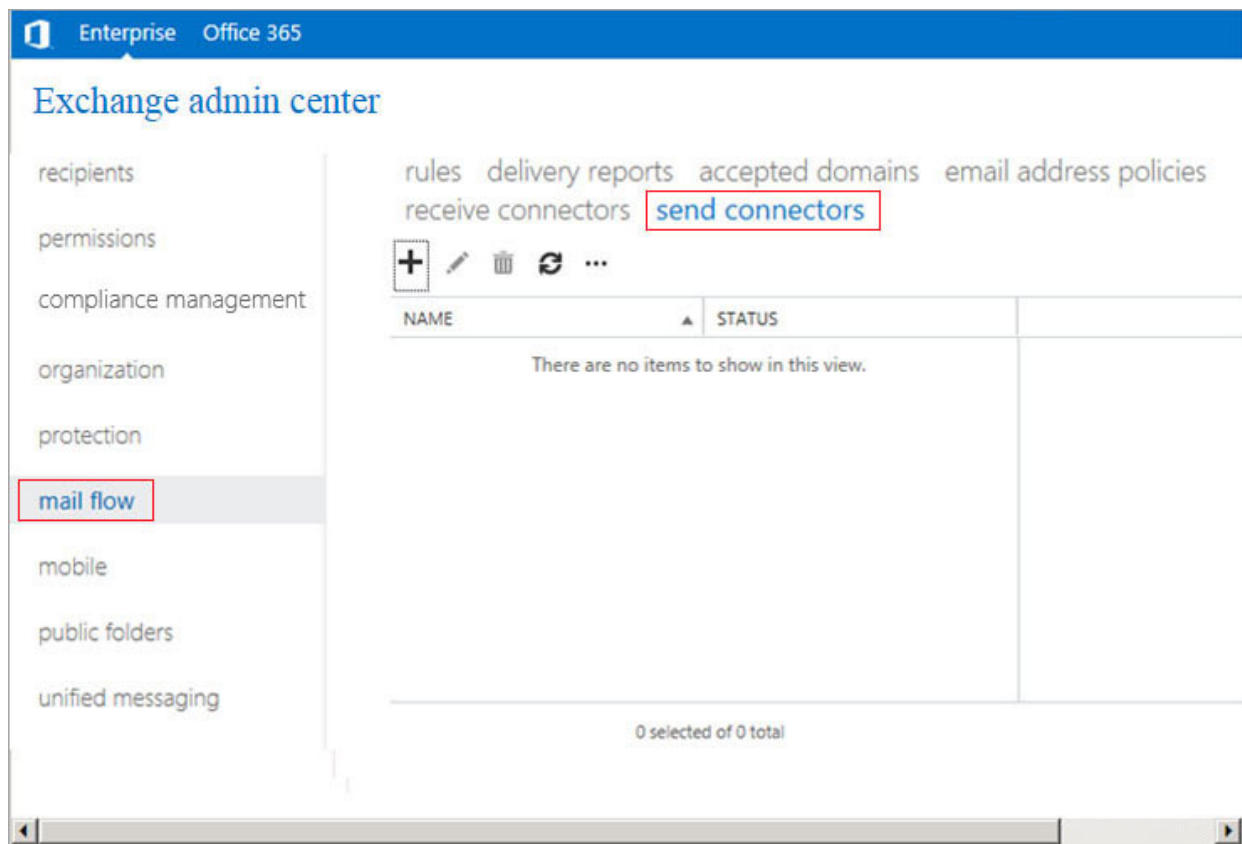
Barracuda Networks recommends hiding the alternate mail contact from the GAL; to do so, with the new mailbox still selected, click the **Edit** () icon. In the general page, turn on **Hide from address lists**:



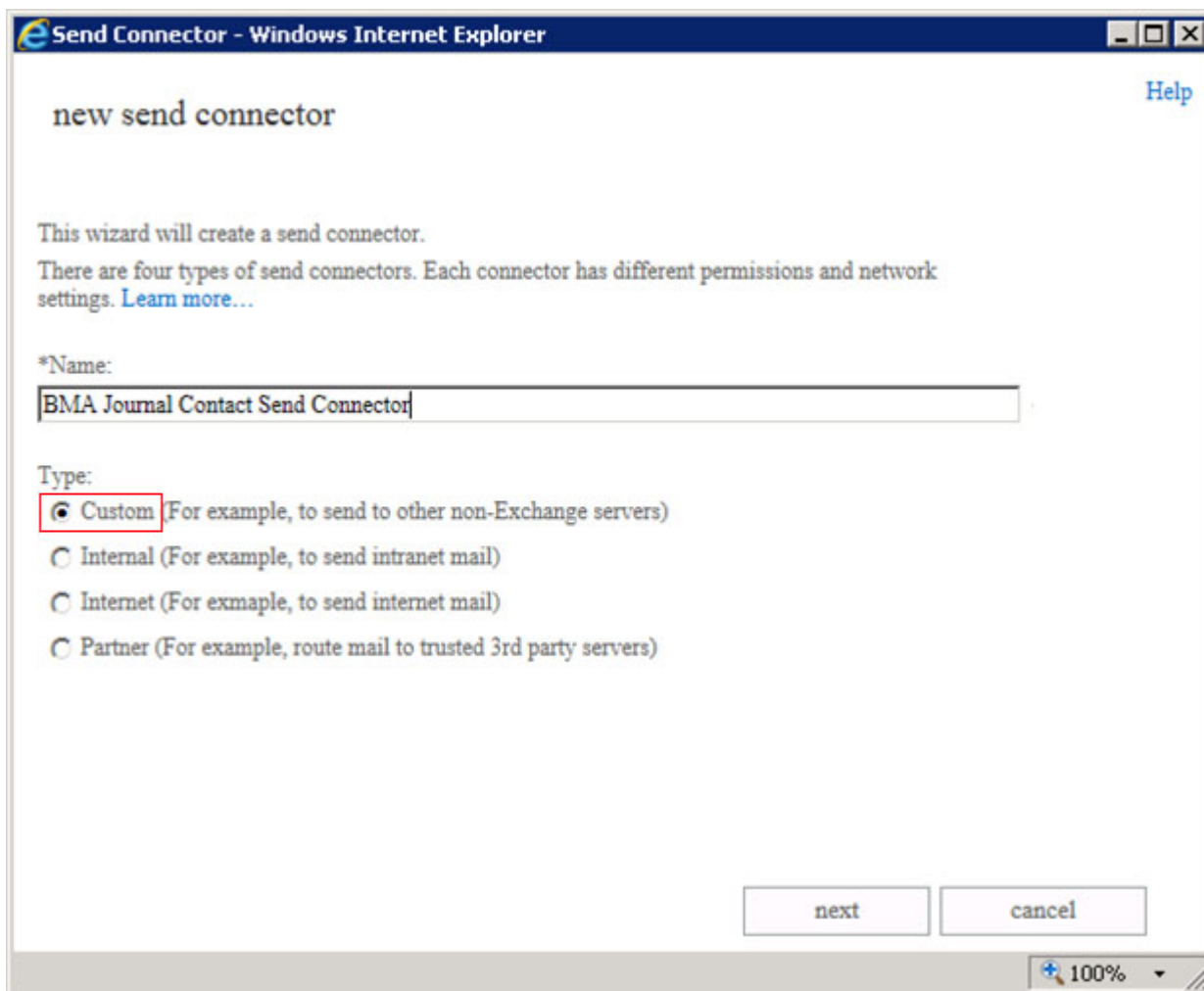
Step 4. Create a Send Connector for the Remote Domain

To route journaled mail that is sent to the contact to the Barracuda Message Archiver, use the following steps to create a Send Connector for the Remote Domain:

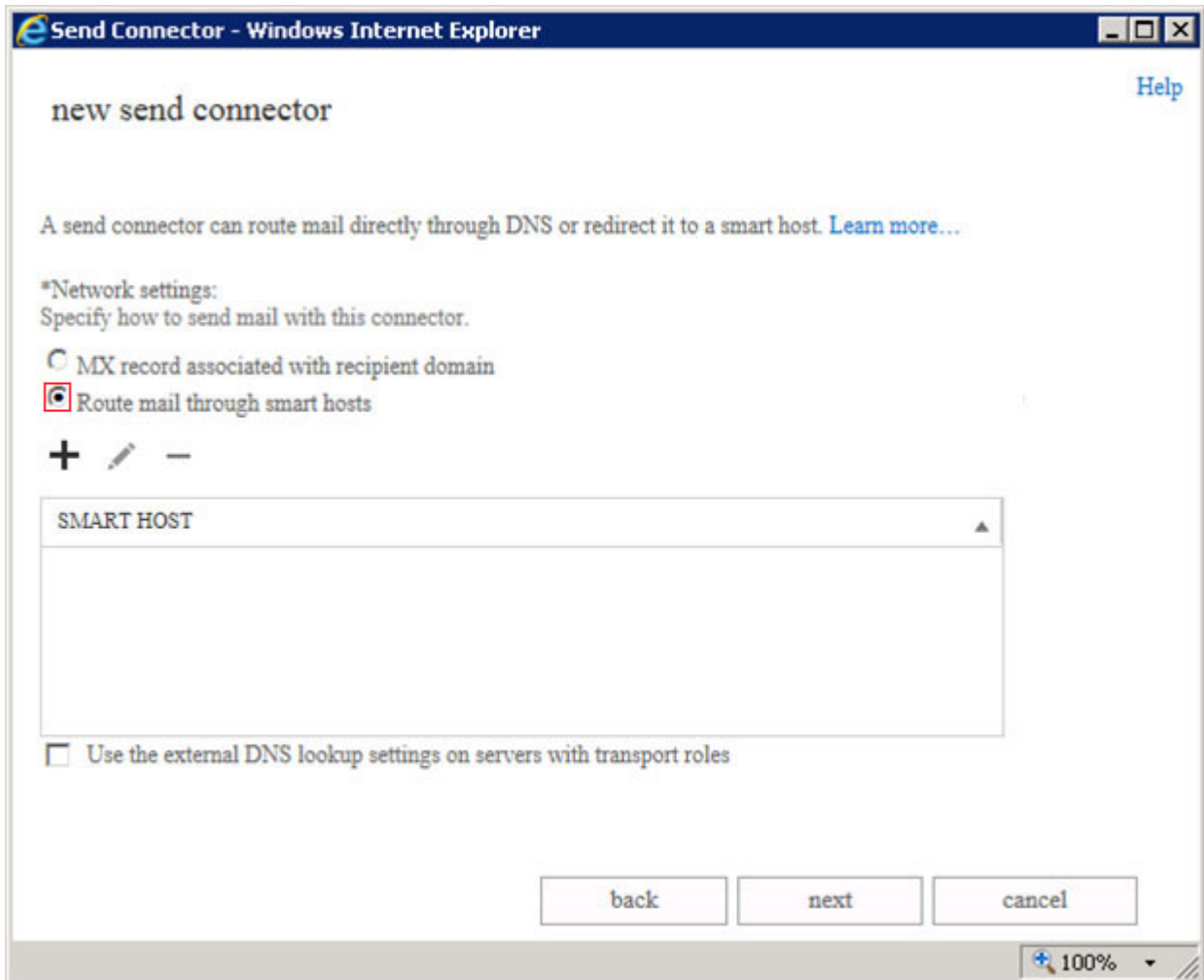
1. In the EAC click **mail flow** in the left pane, select **send connectors** at the top of the page, and then click the **+** symbol to create a new send connector:



2. In the **Name** field, enter a name for the connector, and in the **Type** section, select **Custom**:



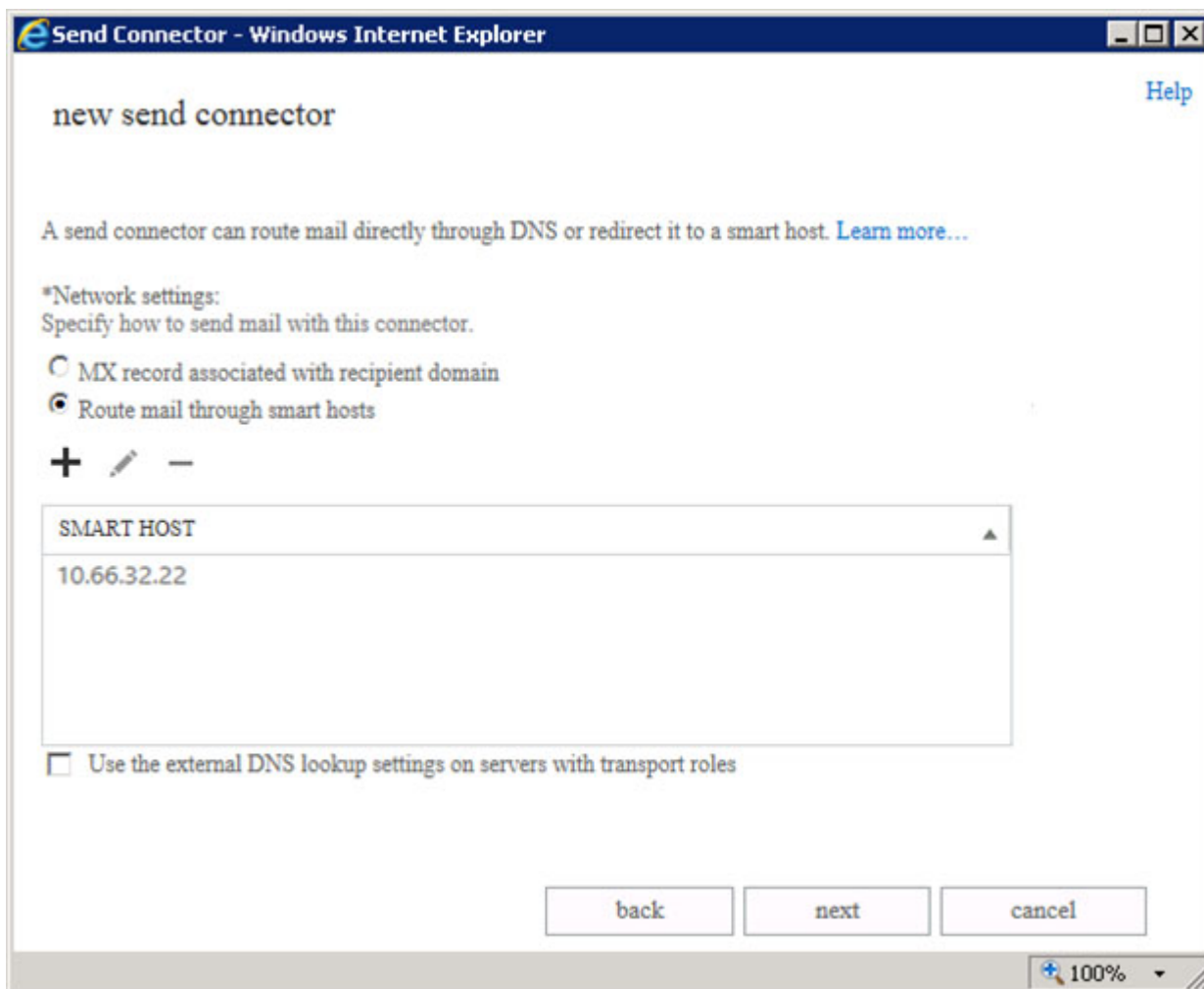
3. Click **next**. In the **Network settings** page, select **Route mail through smart hosts**:



4. Click **next**. In the **add smart host** page, enter the Barracuda Message Archiver fully qualified domain name (FQDN) or IP address:



5. Click **save**. The FQDN or IP address displays in the **SMART HOST** list; verify the address:



new send connector [Help](#)

A send connector can route mail directly through DNS or redirect it to a smart host. [Learn more...](#)

*Network settings:
Specify how to send mail with this connector.

☐ MX record associated with recipient domain
☒ Route mail through smart hosts

+ ✎ -

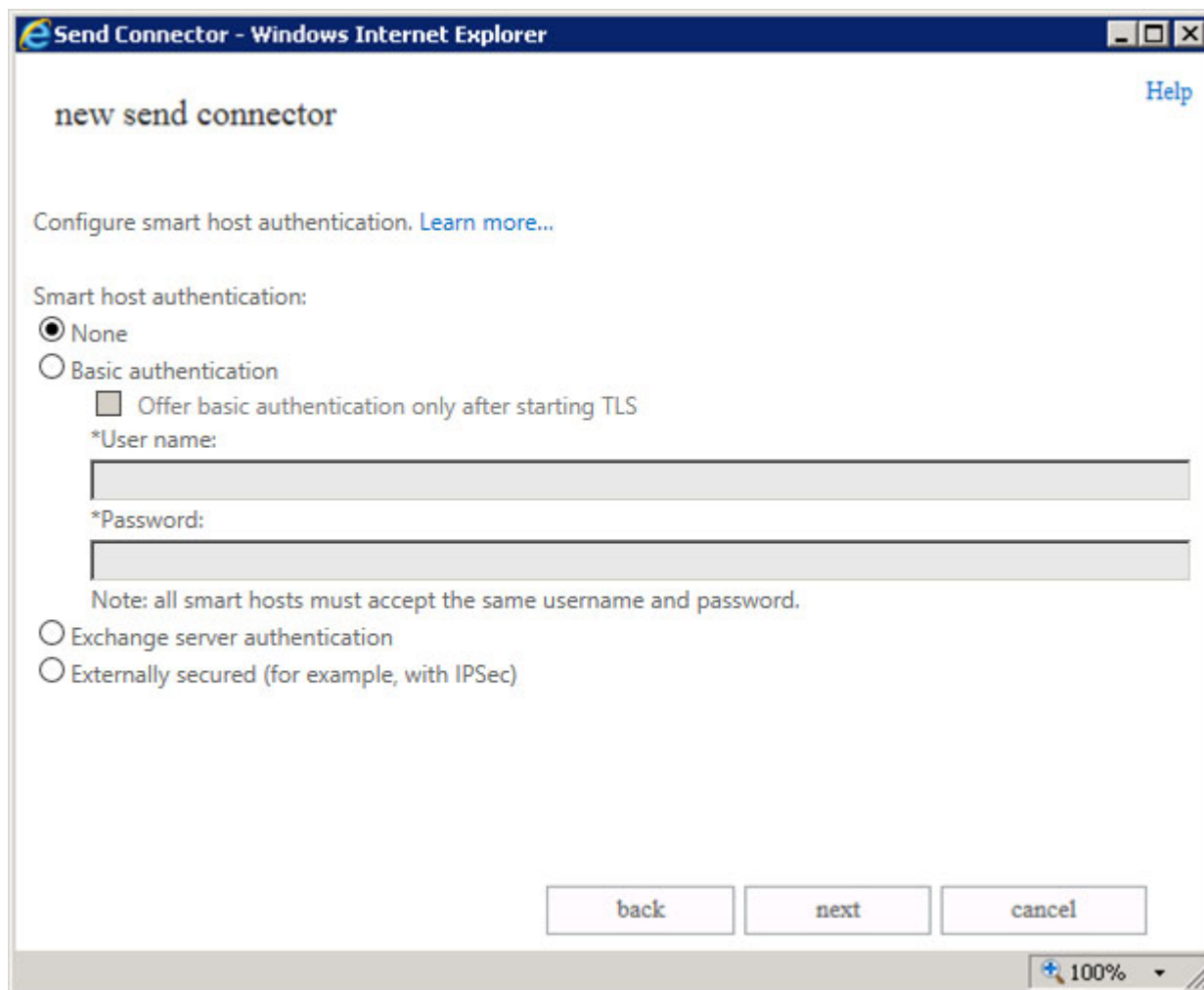
SMART HOST
10.66.32.22

☐ Use the external DNS lookup settings on servers with transport roles

[back](#) [next](#) [cancel](#)

100%

6. Click **next**. In the **Smart host authentication** page, because authentication is not used on the smart host connection to the Barracuda Message Archiver, no changes are necessary; click **next**:



Send Connector - Windows Internet Explorer

new send connector [Help](#)

Configure smart host authentication. [Learn more...](#)

Smart host authentication:

☒ None

☐ Basic authentication

☐ Offer basic authentication only after starting TLS

*User name:

*Password:

Note: all smart hosts must accept the same username and password.

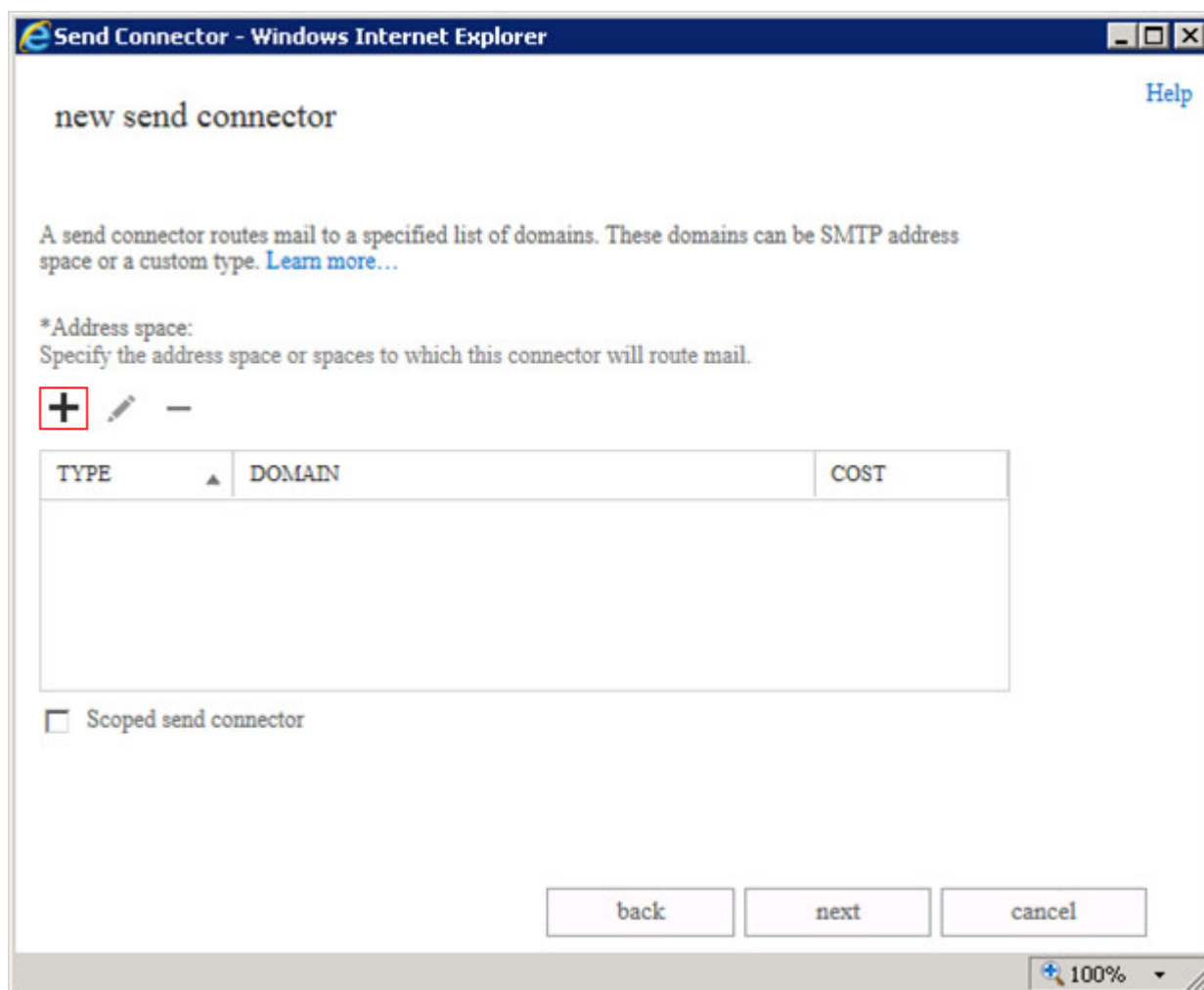
☐ Exchange server authentication

☐ Externally secured (for example, with IPSec)

back next cancel

100%



7. In the **Address space** section, click the + symbol :



new send connector [Help](#)

A send connector routes mail to a specified list of domains. These domains can be SMTP address space or a custom type. [Learn more...](#)

*Address space:
Specify the address space or spaces to which this connector will route mail.

+  

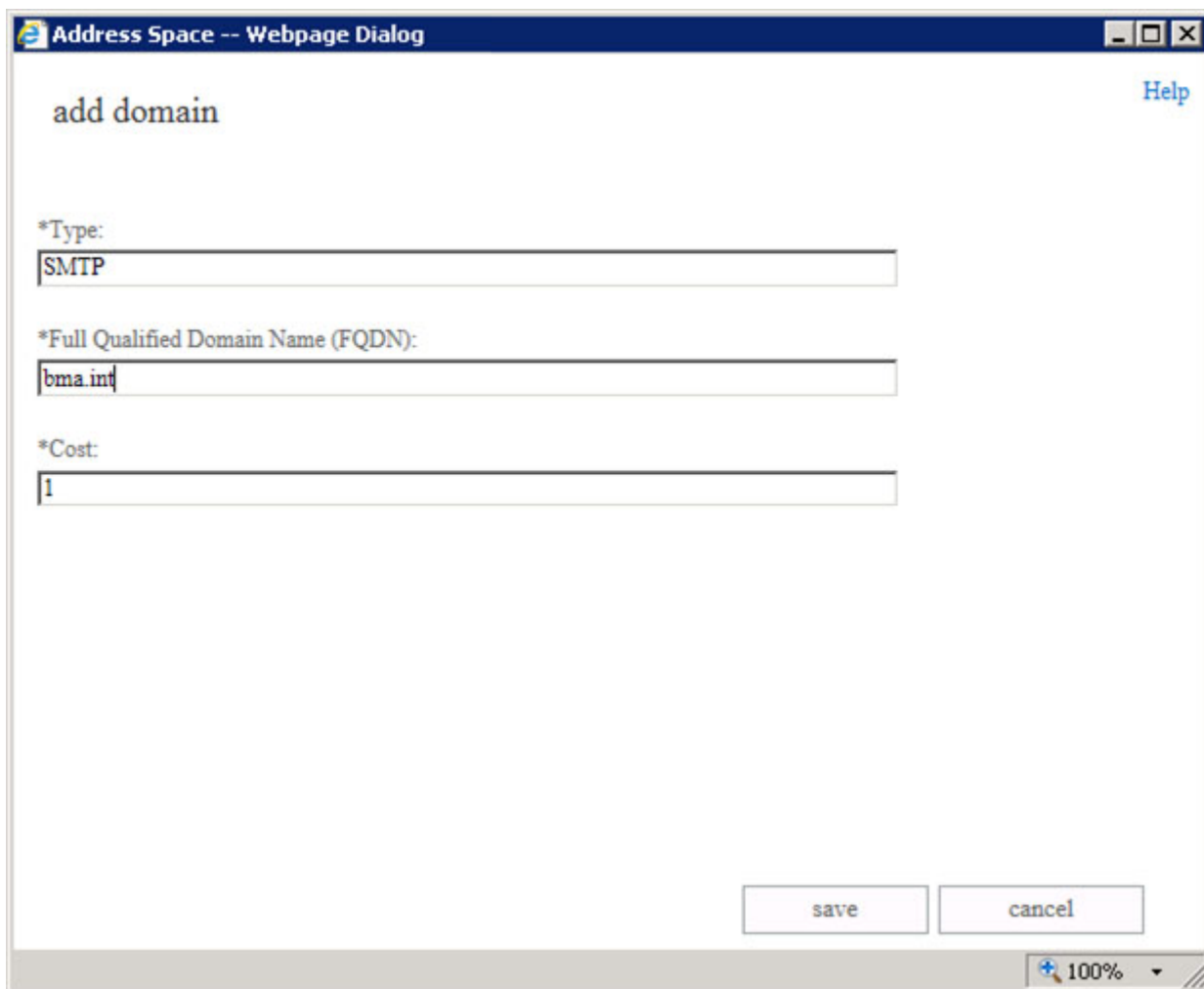
TYPE ▲	DOMAIN	COST
--------	--------	------

☐ Scoped send connector

[back](#) [next](#) [cancel](#)

100%

8. In the **Address Space** page, enter the domain that matches the domain for the external email address used to create the journal contact, for example, bma.int (see *Step 2. Create a Remote Domain From the Exchange Management PowerShell*):



The image shows a web-based dialog box titled "Address Space -- Webpage Dialog". It has a blue header bar with the title and standard window controls (minimize, maximize, close). The main content area is white and contains the text "add domain" at the top left and a "Help" link at the top right. Below this, there are three labeled input fields: "*Type:" with a text box containing "SMTP", "*Full Qualified Domain Name (FQDN):" with a text box containing "bma.int", and "*Cost:" with a text box containing "1". At the bottom right of the dialog are two buttons labeled "save" and "cancel". The bottom status bar shows a zoom icon, "100%", and a close icon.

9. The domain is added to the **Address space** list:

Learn more...'. A section titled '*Address space:' with the instruction 'Specify the address space or spaces to which this connector will route mail.' contains a table. Above the table are icons for adding (+), editing (pencil), and deleting (-) entries. The table has three columns: 'TYPE', 'DOMAIN', and 'COST'. It contains one row with 'SMTP' in the TYPE column, 'bma.int' in the DOMAIN column, and '1' in the COST column. Below the table is a checkbox labeled 'Scoped send connector' which is currently unchecked. At the bottom are three buttons: 'back', 'next', and 'cancel'. The bottom right corner shows a zoom level of 100%." data-bbox="118 131 893 582"/>

Send Connector - Windows Internet Explorer

new send connector [Help](#)

A send connector routes mail to a specified list of domains. These domains can be SMTP address space or a custom type. [Learn more...](#)

*Address space:
Specify the address space or spaces to which this connector will route mail.

+ ✎ —

TYPE	DOMAIN	COST
SMTP	bma.int	1

☐ Scoped send connector

back next cancel

100%



10. Click **next**. In the **Source server** section, click the + symbol:

Learn more...'. Then, a section titled '*Source server:' explains: 'Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.' Below this is a table with columns 'SERVER', 'SITE', and 'ROLE'. The table is currently empty. Above the table is a red square button with a white plus sign, and a minus sign to its right. At the bottom of the form are three buttons: 'back', 'finish', and 'cancel'. The bottom right corner shows a zoom level of 100%." data-bbox="118 131 893 582"/>

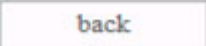


new send connector [Help](#)


A send connector sends mail from a list of servers with transport roles or Edge Subscriptions. [Learn more...](#)

***Source server:**
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

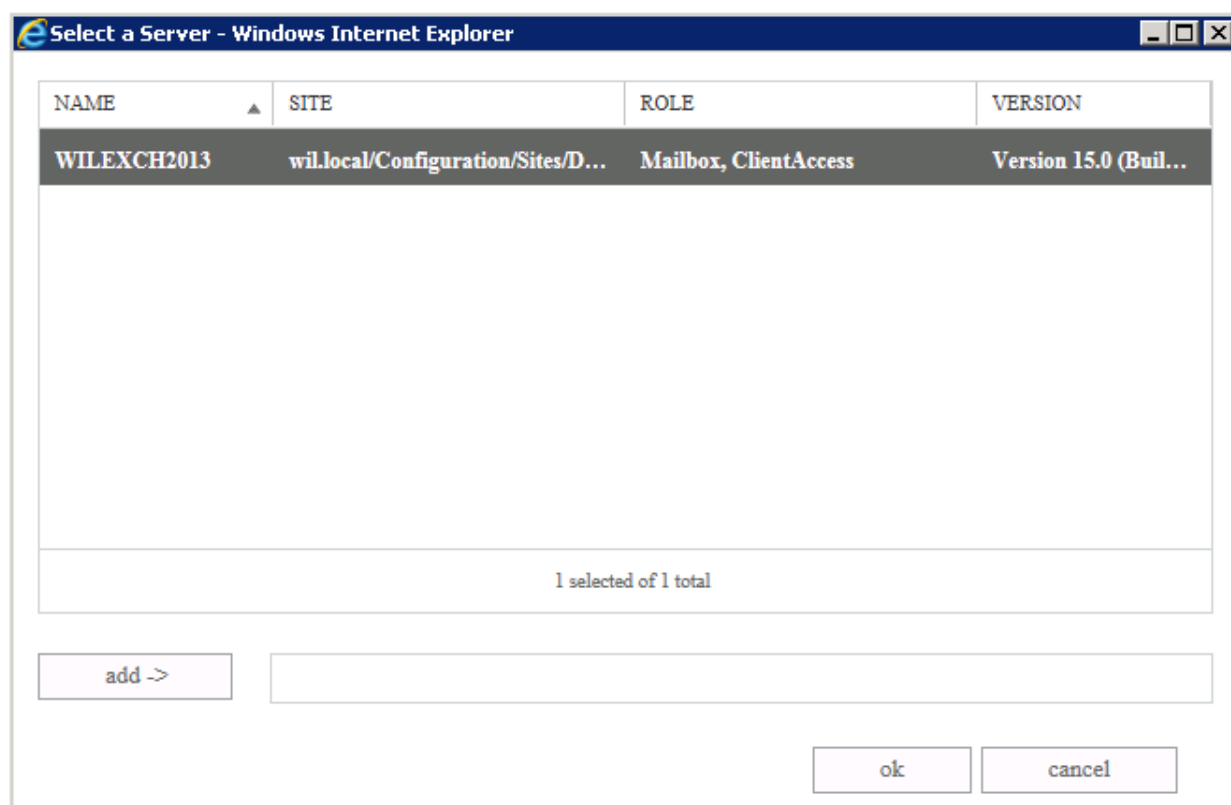
 

SERVER	SITE	ROLE
--------	------	------

 100%

11. Verify all the Exchange Servers that are in the CAS role are listed; click **add** to add additional servers:



12. Click **ok**. In the **Source server** page, the selected servers display:

Learn more...'. Then, a section titled '*Source server:' says 'Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.' Below this is a table with columns 'SERVER', 'SITE', and 'ROLE'. The table contains one row: 'WILEXCH2013', 'wil.local/Configuration/Sites/Default-First-Site-Name', and 'Mailbox, Clie...'. At the bottom are three buttons: 'back', 'finish', and 'cancel'. The bottom right corner shows a zoom level of 100%." data-bbox="117 131 893 582"/>

new send connector [Help](#)

A send connector sends mail from a list of servers with transport roles or Edge Subscriptions. [Learn more...](#)

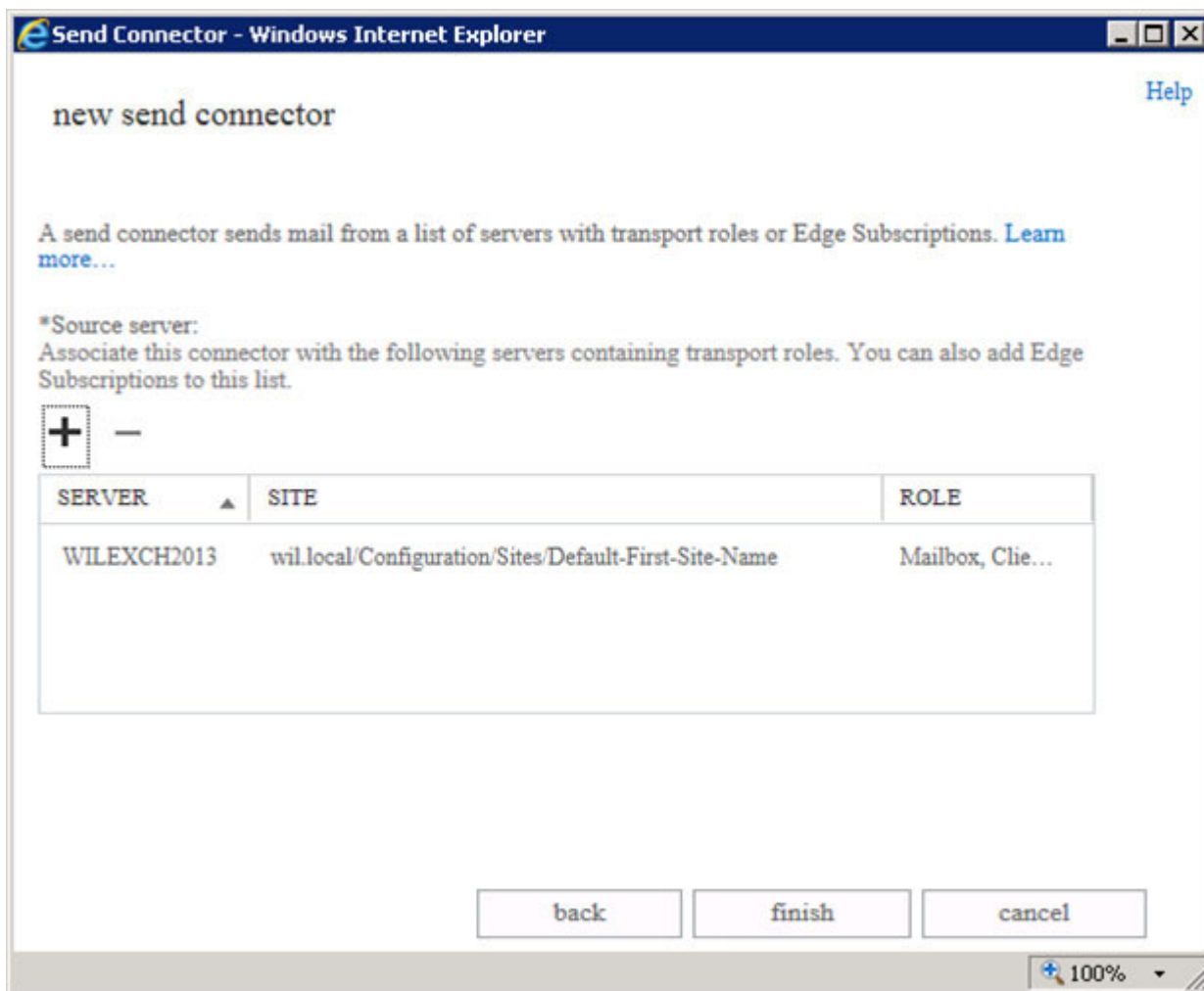
*Source server:
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

SERVER	SITE	ROLE
WILEXCH2013	wil.local/Configuration/Sites/Default-First-Site-Name	Mailbox, Clie...

[back](#) [finish](#) [cancel](#)

100%

- Click **finish**. The new send connector displays as **enabled** in the **send connectors** list:



new send connector [Help](#)

A send connector sends mail from a list of servers with transport roles or Edge Subscriptions. [Learn more...](#)

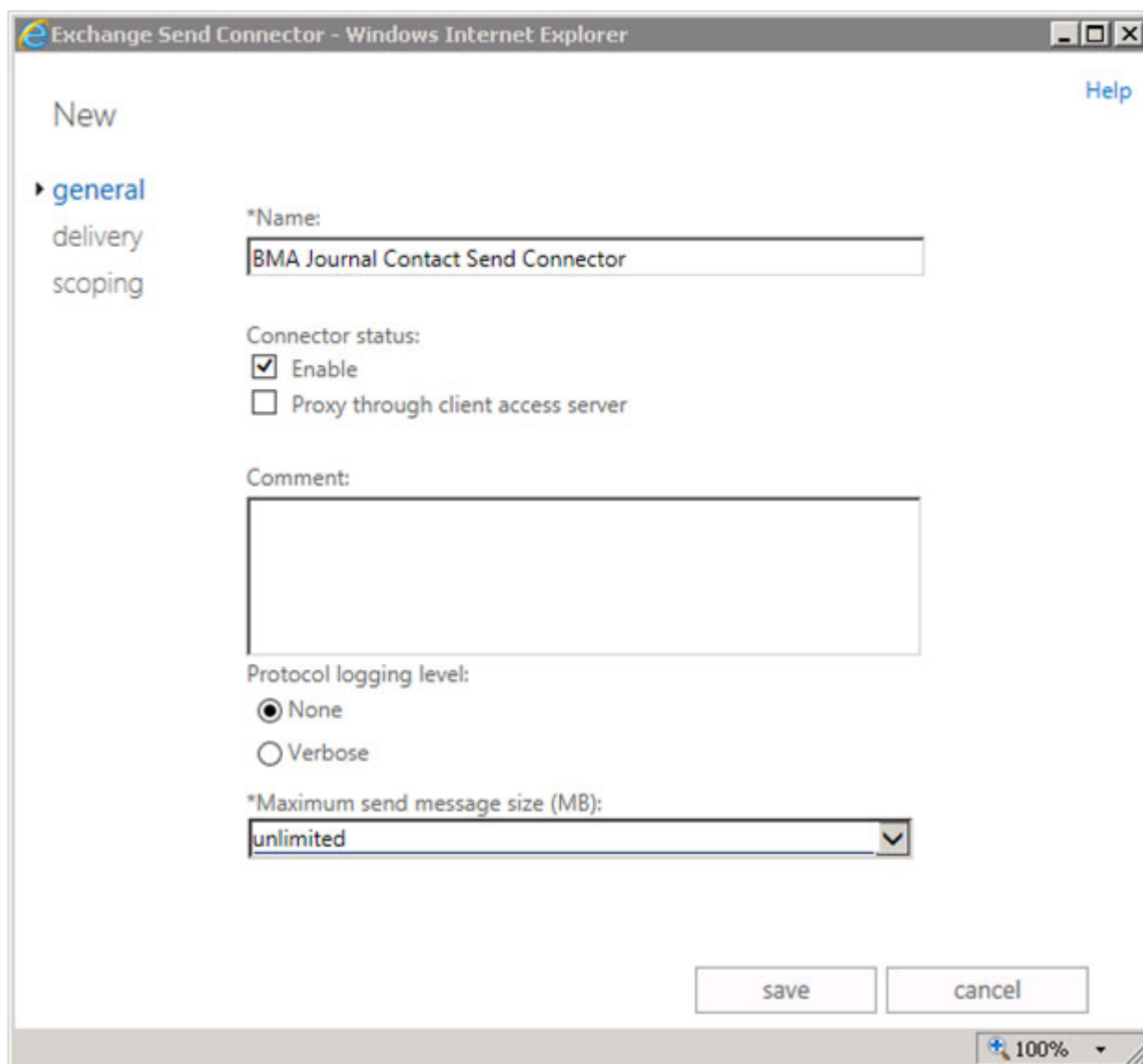
*Source server:
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

SERVER	SITE	ROLE
WILEXCH2013	wil.local/Configuration/Sites/Default-First-Site-Name	Mailbox, Clie...

[back](#) [finish](#) [cancel](#)

100%

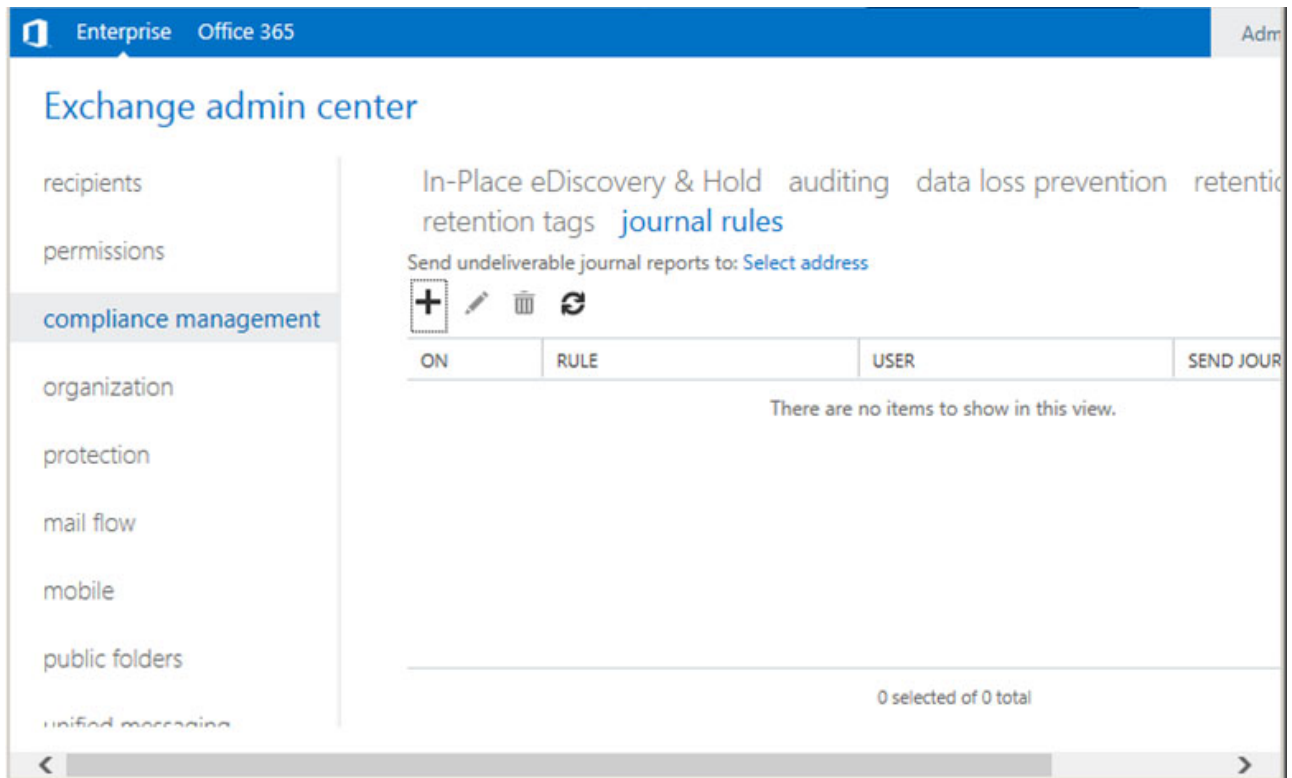
14. Click the **Edit** (✎) icon to edit the **Send Connector** properties. From the **Maximum send message size (MB)** drop-down list, select **unlimited**:



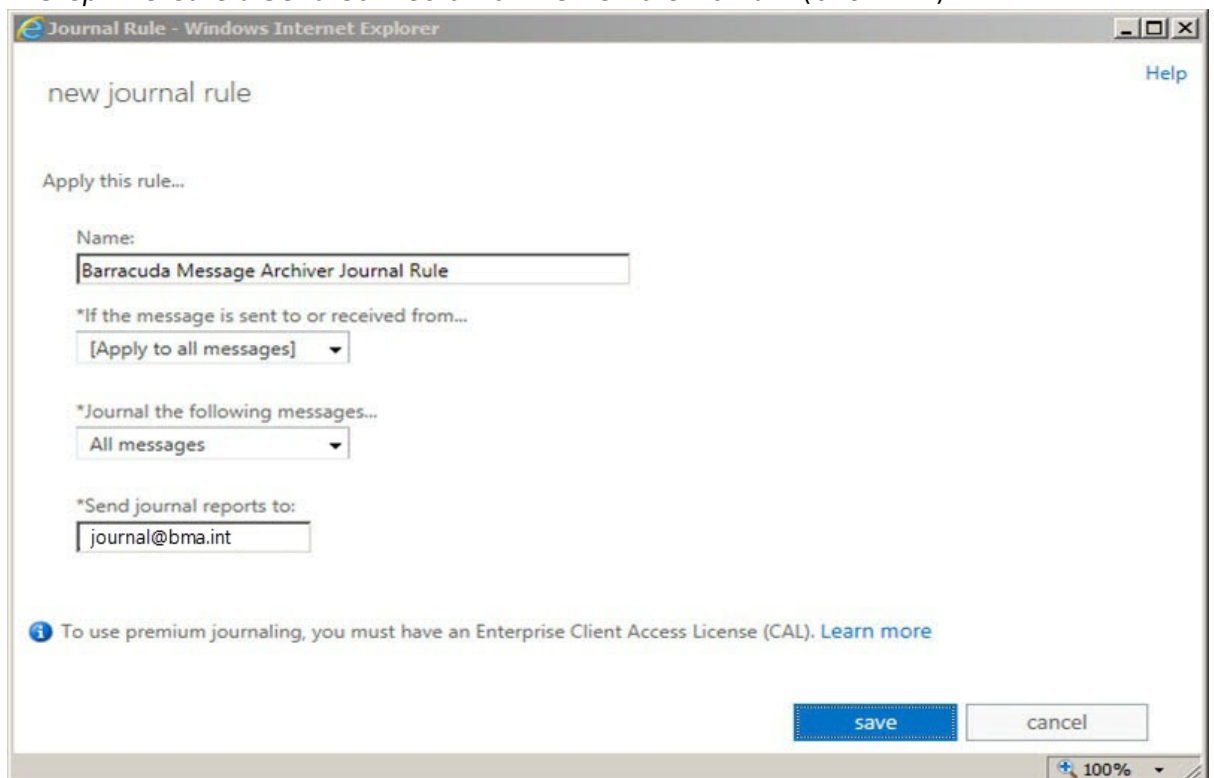
15. Click **save**.

Step 5. Create a Journal Rule

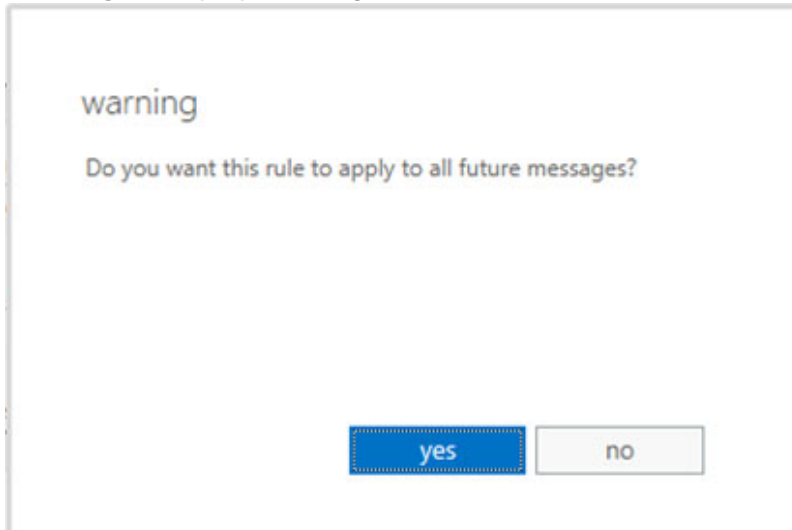
1. Open the EAC, click **compliance management** in the left pane, select **journal rules** at the top of the page, and then click the + symbol:



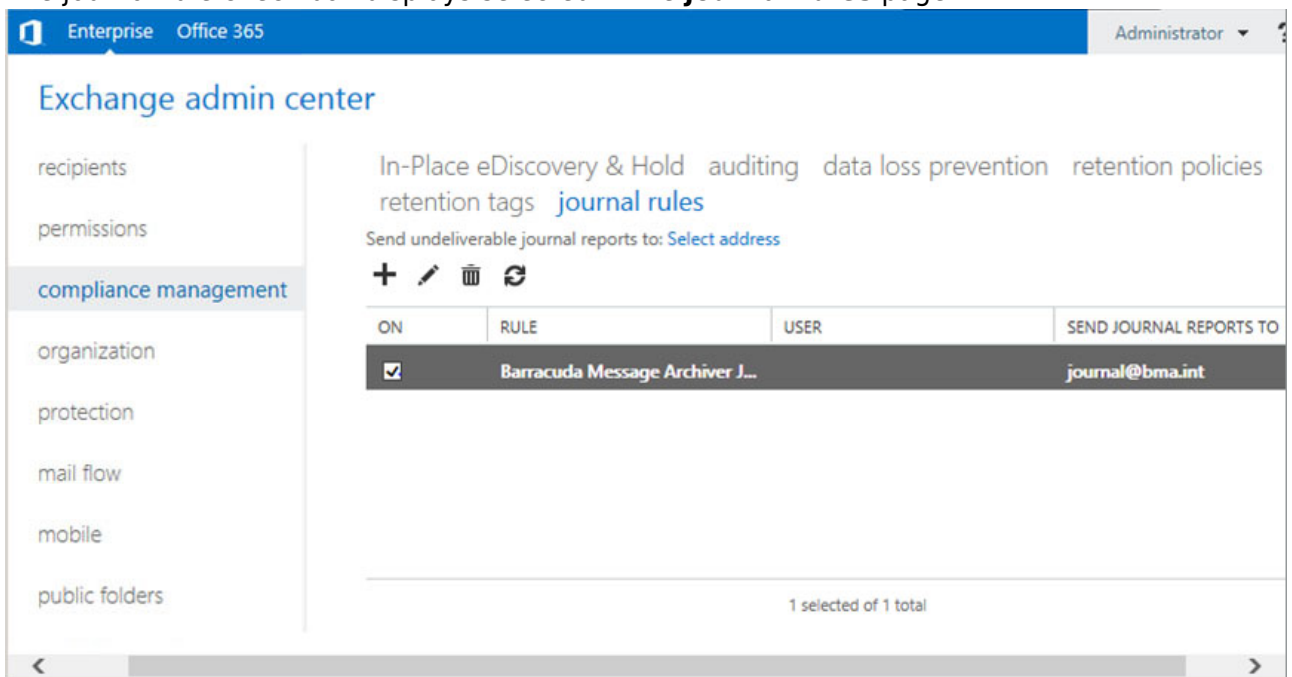
2. In the **new journal rule** page, enter the following details:
 1. Enter a name for the journal rule
 2. From the **If the message is sent or received from** list, select **Apply to all messages**
 3. From the **Journal the following messages** list, select **All messages**
 4. In the **Send Journal Reports** field, enter the email address of the contact created in Step 4. *Create a Send Connector for the Remote Domain (bma.int)*:



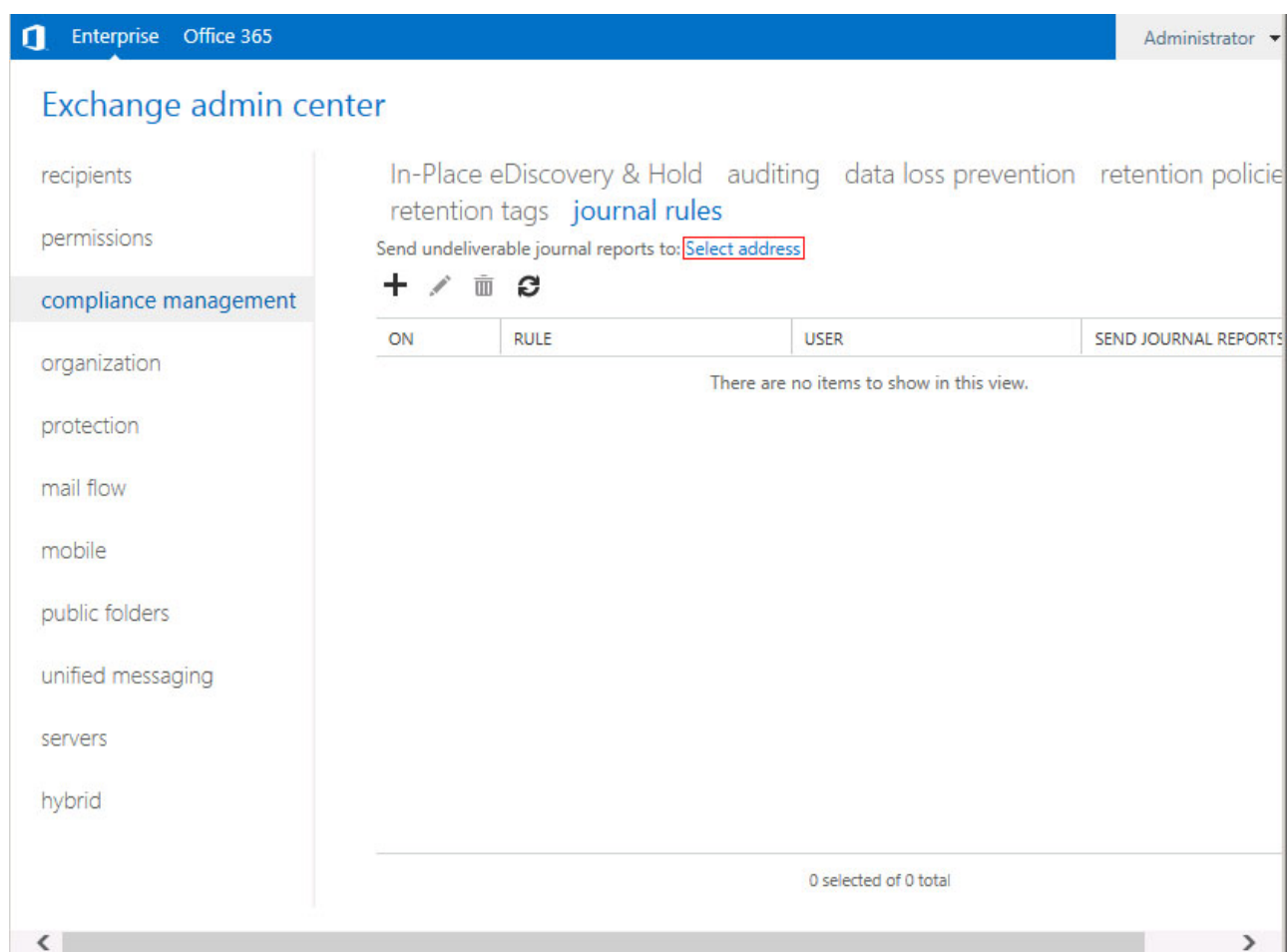
3. Click **save**. If the warning message **Do you want this rule to apply to all future messages** displays, click **yes**:



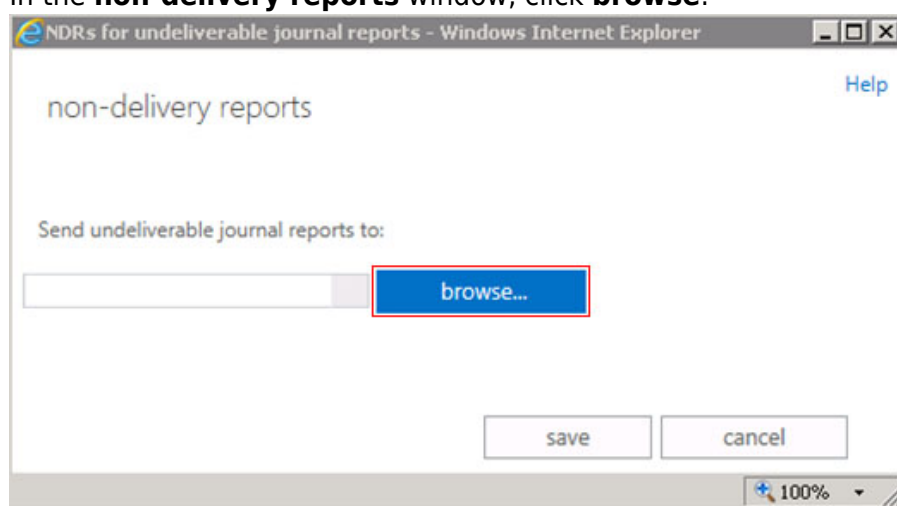
4. The journal rule check box displays selected in the **journal rules** page:



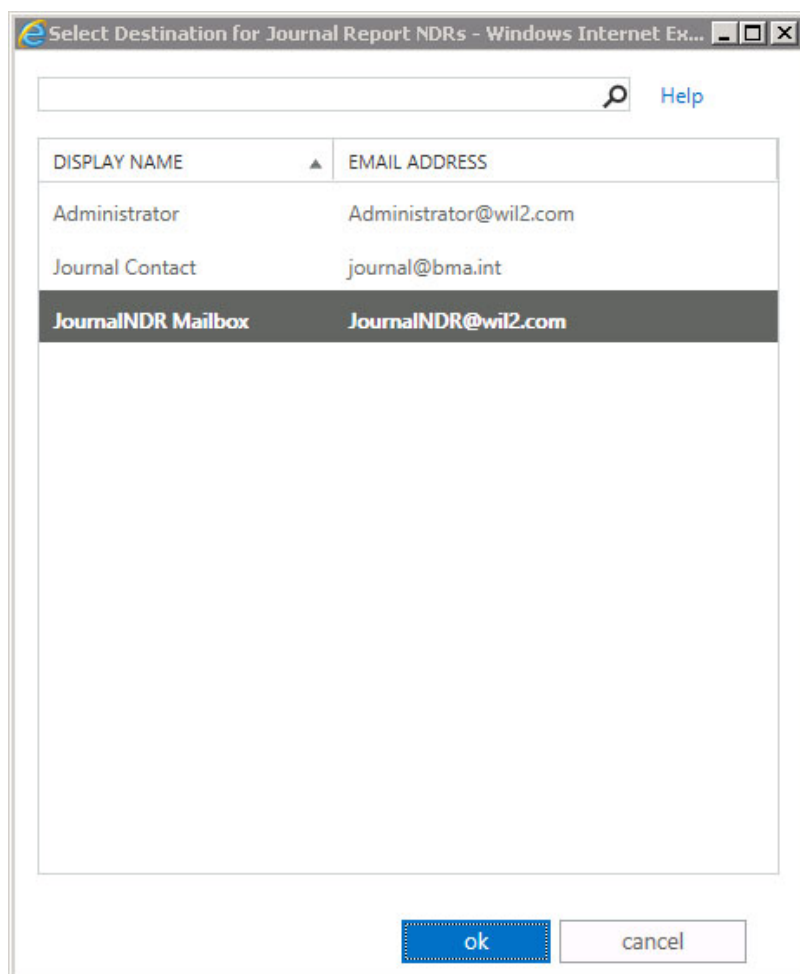
5. In the **Send undeliverable journal reports to** section, click **Select address**:



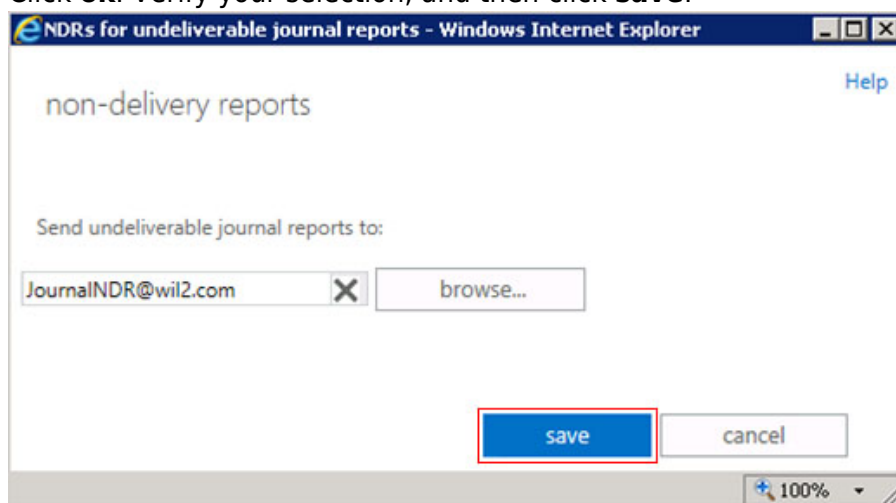
6. In the **non-delivery reports** window, click **browse**:



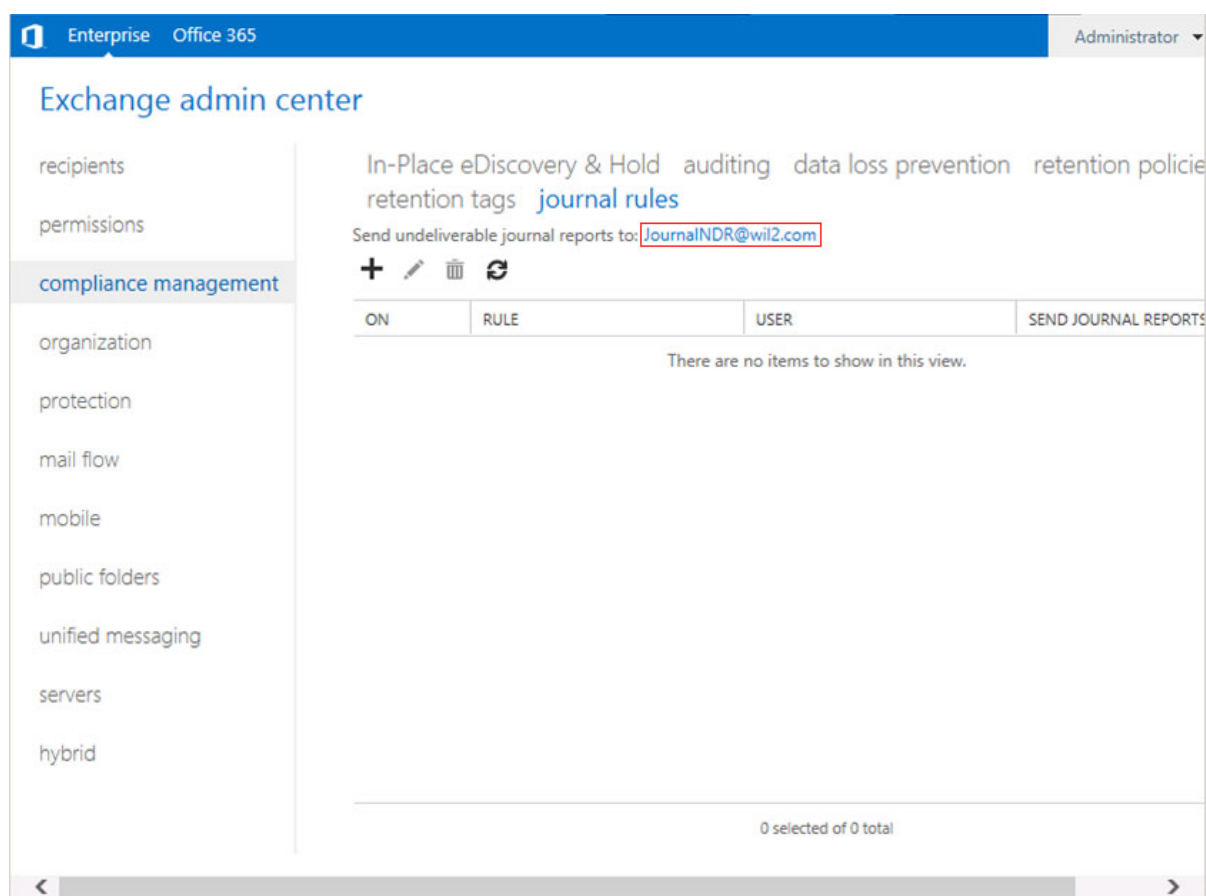
7. Browse to and select the alternate mailbox created in Step 3. Create a Recipient Mail Contact/Alternate Email Address (**Journal NDR Mailbox**):



8. Click **ok**. Verify your selection, and then click **save**:



9. The address displays in the **Send undeliverable journal reports to** section:



The configuration is now complete and journaled mail is forwarded to the Barracuda Message Archiver. Log into the Barracuda Message Archiver, and go to the **Basic > Search** page in the web interface to verify that new mail is being processed. Note that it may take up to 30 minutes before journaled mail is available in the search results.

Figures

1. recipient_update.jpg
2. new_mail_contact.jpg
3. contact_created.jpg
4. mailboxes.jpg
5. journal_ndr.jpg
6. journal_ndr2.jpg
7. editUpdate.jpg
8. hide.jpg
9. sendConnector.jpg
10. new_send_connector.jpg
11. new_send_connector2.jpg
12. add_smart_host.jpg
13. smart_host_added.jpg
14. authenticationUpdate.jpg
15. address_space.jpg
16. add_domain.jpg
17. verify_address_space.jpg
18. source_server.jpg
19. verify_listed_servers.png
20. finishUpdate1.jpg
21. finishUpdate2.jpg
22. editUpdate.jpg
23. edit_connector.jpg
24. journal_rule01.jpg
25. JournalRulebmaint1.jpg
26. warning 02.jpg
27. journal_rule02.jpg
28. select_address.jpg
29. non_delivery.jpg
30. journal ndr 3.jpg
31. non_delivery02.jpg
32. journal_ndr4.jpg

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