

How to Configure Barracuda Load Balancer ADC with Barracuda Message Archiver for High Availability SMTP Journaling

<https://campus.barracuda.com/doc/53676135/>

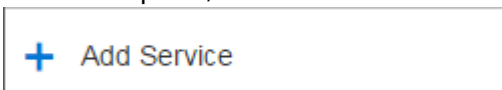
By default, when journaling to a Barracuda Message Archiver from Microsoft Exchange, you must configure the send connector to send mail to one of the two units. If that unit goes down, you must manually change the send connector IP address to point to the other unit. This can potentially result in lost mail. If you have a Barracuda Load Balancer ADC and Barracuda Message Archiver in a High Availability (HA) setup, Barracuda Networks recommends using the steps in this article to configure the Barracuda Load Balancer ADC to handle the SMTP traffic and balance it accordingly.

Step 1. Configure the Barracuda Message Archiver

1. Log in to the first Barracuda Message Archiver, and go to the **Mail Sources > SMTP** page.
2. In the **Trusted SMTP Servers** section, enter the IP of your Exchange Servers as well as the LAN IP of your Barracuda Load Balancer ADC.
3. Go to the **Basic > IP Configuration** page. In the **TCP/IP Configuration** page, update the **Default Gateway** to point to the LAN IP address of your Barracuda Load Balancer ADC.
4. Click **Save**.
5. Complete steps 1-4 in this section for the second Barracuda Message Archiver in the HA setup.

Step 2. Configure the Barracuda Load Balancer ADC

1. Log in to your Barracuda Load Balancer ADC using your admin credential, and go to the **BASIC > Services** page.
2. In the left pane, click **Add Service**:



3. In the name field, type: `Barracuda_Message_Archiver_SMTP`
4. Select **default** as the **Group**, and from the **Type** drop-down menu, select **TCP Proxy**.
5. In the **IP Address** field, enter an available internal IP address to be used for this service followed by port 25.
6. Enter your network **Netmask**, and select the **Interface**:

Add Service

Service Configuration ?

Name

Barracuda_Message_Archiver_SMT

Group

default

Service

☒ Enable ☐ Disable

Type

TCP Proxy ▼

IP Address

192.168.1.100

 :

25

Netmask

255.255.255.0

Interface

ge-1-1 ▼

Auto-Recover

☒ Yes ☐ No

Whether a real server that had failed the Service Monitor test but now passes is automatically re-enabled for the service.

Session Timeout

60

 seconds

The idle timeout, in seconds, for connections with clients. 0 means the session never times out. Default: 60

Connection Logs

☐ Enable ☒ Disable

Load Balancing ?

Algorithm

☒ Weighted Round Robin ☐ Weighted Least Connections

Weighted Round Robin: Distributes more connections to servers with higher weights.

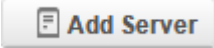
Cancel

Create

7. Click **Create**.

Step 3. Add the Barracuda Message Archivers to the Service

Once you create the service, add the two Barracuda Message Archivers as the real servers.

1. Log in to your Barracuda Load Balancer ADC using your admin credential, and go to the **BASIC > Services** page.
2. Click **Add Server**:

3. For the *primary* Barracuda Message Archiver, enter the device name in the **Name** field, and enter the **IP Address** followed by the **Port** number (25):

Add Server

Server Configuration ?

Name

Message_Archiver_Primary

Status

☒ Enable ☐ Disable ☐ Maintenance ☐ Sticky

Identifier:

IP Address ▼

The server will be identified using an IP Address or a Hostname that should be resolved.

IP Address

192.168.1.99 : 25

☐ Backup server

This server will be used as a last resort server when all other servers fail or found to be out of service.

Weight

1

Weight of this server to be used by the Load Balancing Algorithm. When Adaptive Scheduling is turned on this field will be disabled.

Advanced Options

Show ▼

Server Monitor ?

Testing Method

Use Service Test Method ▼

Use Service Test Method - The Service Monitor tests this Real Server using the Test Method specified in the Service Detail page. No options needed.

Test

Cancel

Create

4. Click **Create**.

5. Click **Add Server**:



6. For the *secondary* Barracuda Message Archiver, enter the device name in the **Name** field, and enter the **IP Address** followed by the **Port** number (25).

7. Select **Backup server**:

Add Server

Server Configuration ?

Name

Message_Archiver_Backup

Status

☒ Enable ☐ Disable ☐ Maintenance ☐ Sticky

Identifier:

IP Address ▾

The server will be identified using an IP Address or a Hostname that should be resolved.

IP Address

192.168.1.101 : 25

☒ Backup server

This server will be used as a last resort server when all other servers fail or found to be out of service.

Weight

0

Weight of this server to be used by the Load Balancing Algorithm. When Adaptive Scheduling is turned on this field will be disabled.

Advanced Options

Show ▾

Server Monitor ?

Testing Method

Use Service Test Method ▾

Use Service Test Method - The Service Monitor tests this Real Server using the Test Method specified in the Service Detail page. No options needed.

Test

Cancel

Create

8. Click **Create**.
9. Both the primary and backup Barracuda Message Archivers should now display in the **Configured Servers** table with a green checkmark icon in the **Status** field indicating the real servers are up and responding to requests:

Configured Servers 



Name ▲	IP Address ⇅	Traffic	Status ⇅	Actions
 Message_Archiv...	192.168.1.101:25	0		Maintenance Disable Edit Delete
 Message_Archiv...	192.168.1.99:25	0		Maintenance Disable Edit Delete

If the **Status** field does not display the green checkmark icon for one or more configured servers, verify you have entered the correct IP address and are able to reach the device over port 25.

10. Click **Save Changes**.

Step 4. Configure Journaling

Select your journaling deployment.

Configure Envelope Journaling for Microsoft Exchange Server 2013 and Newer - Standard

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. Use the steps in this article to configure Envelope Journaling.

Use the examples 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.

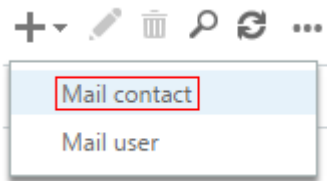
To create a Remote Domain, you must enter a **Name** to describe the domain, and the actual **Domain Name** to use. In this example, bma.int is the "fake" Domain Name that is used. You can use bma.int or create your own "fake" Domain Name. Note that this Domain Name is used when creating the **Mail Contact**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

1. Open the **Exchange Management Shell**.
2. Execute 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. Next, execute 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`

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

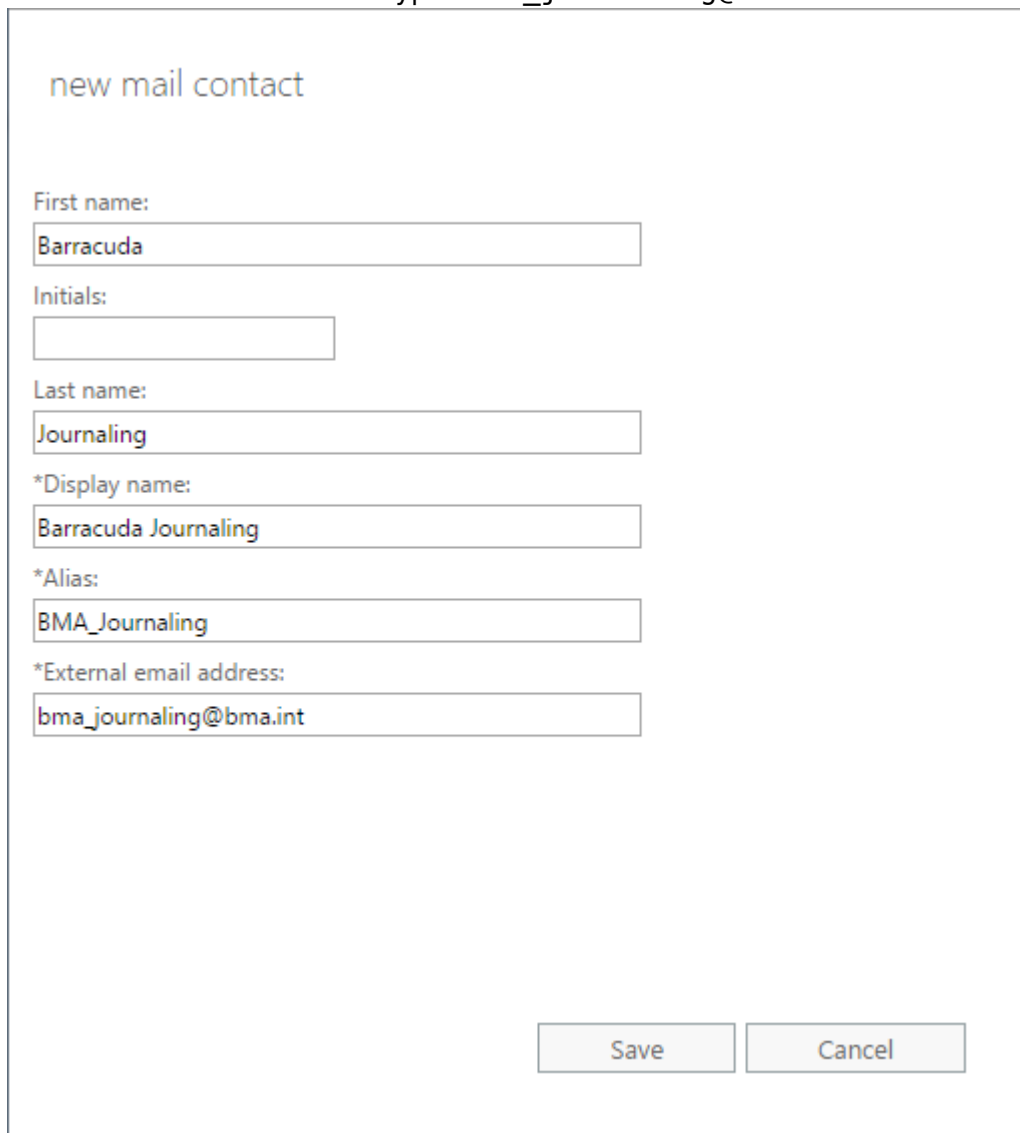
The Mail Contact is the account that is to act as a "holding location" for journaled messages. The email address associated with this account is the designated recipient and must be associated with a non-existent, non-routable dummy Domain Name created above in *Step 2. Create a Remote Domain From the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

1. Log in to the Exchange Admin Center (EAC), and click **recipients > contacts**.
2. Click the + symbol, and click **Mail contact**:



3. In the new mail contact dialog box, enter the following details:

1. **First name** - Type Barracuda
2. **Initials** - Leave this field blank
3. **Last name** - Type Journaling
4. **Display name** - This field populates automatically
5. **Alias** - Type BMA_Journaling
6. **External email address** - Type bma_journaling@bma.int



new mail contact

First name:

Initials:

Last name:

*Display name:

*Alias:

*External email address:

4. Click **save** .

Hide Contact from Global Address List

Barracuda Networks recommends hiding the mail contact from the Global Address List. You can

use the following PowerShell command to hide the mail contact:

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

Enter the following command to verify the setting:

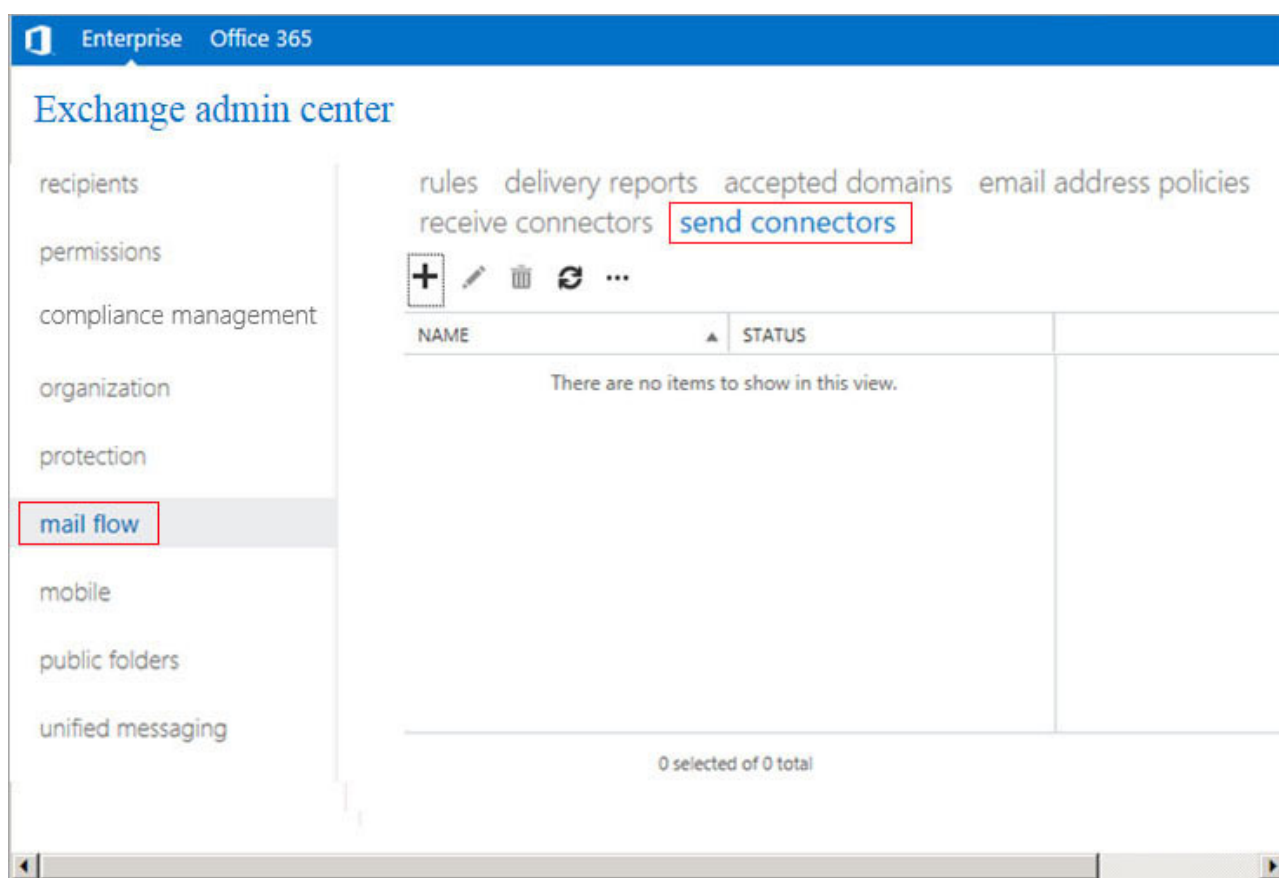
```
Get-MailContact | Where {$_.Name -eq "Barracuda Journaling"} | Format-table Name, HiddenFromAddressListsEnabled
```

Step 4. Create a Send Connector for the Remote Domain

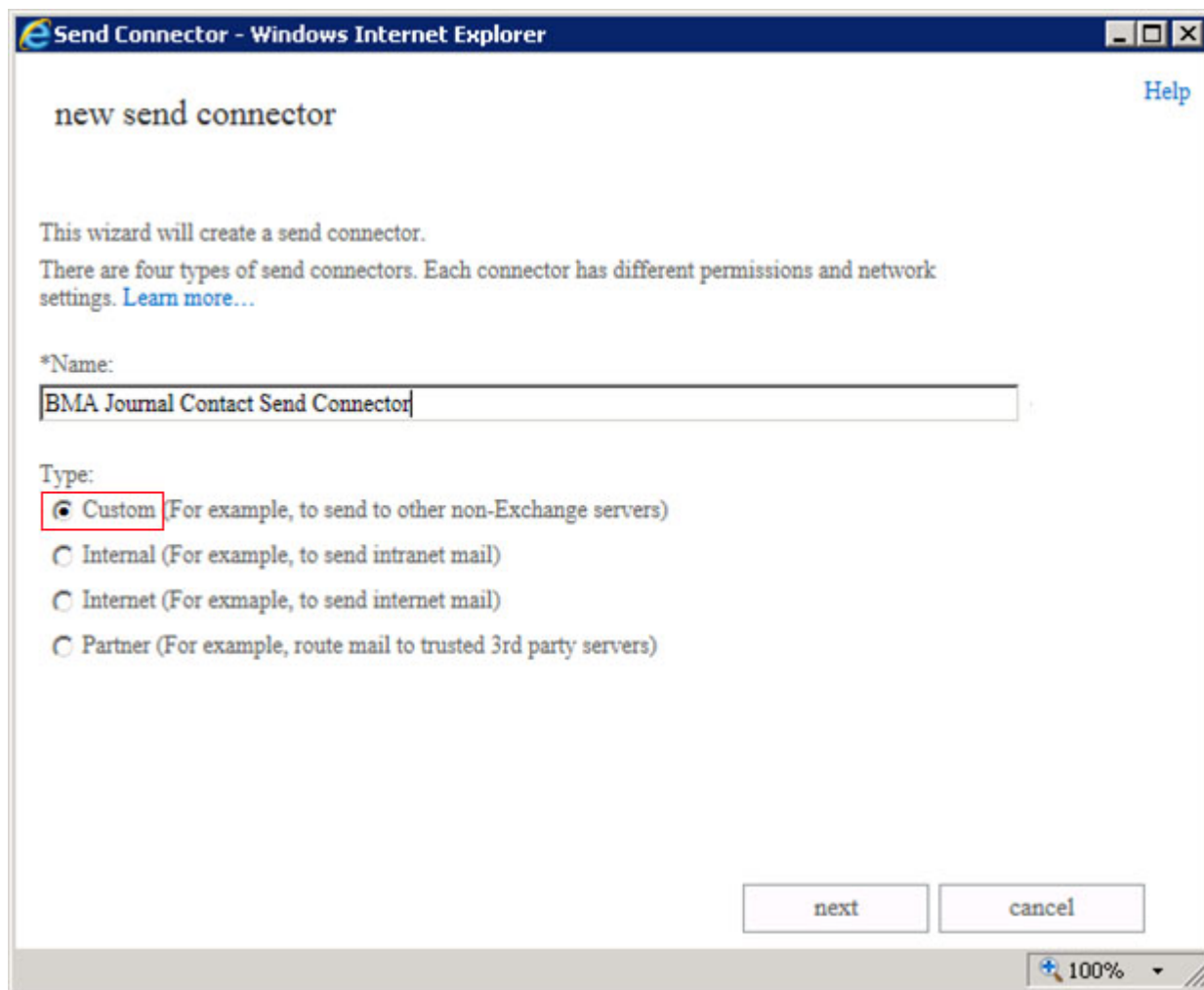
To ensure proper mail flow, verify that the Barracuda Message Archiver send connector has a lower cost value than the send connector for outbound SMTP traffic.

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:

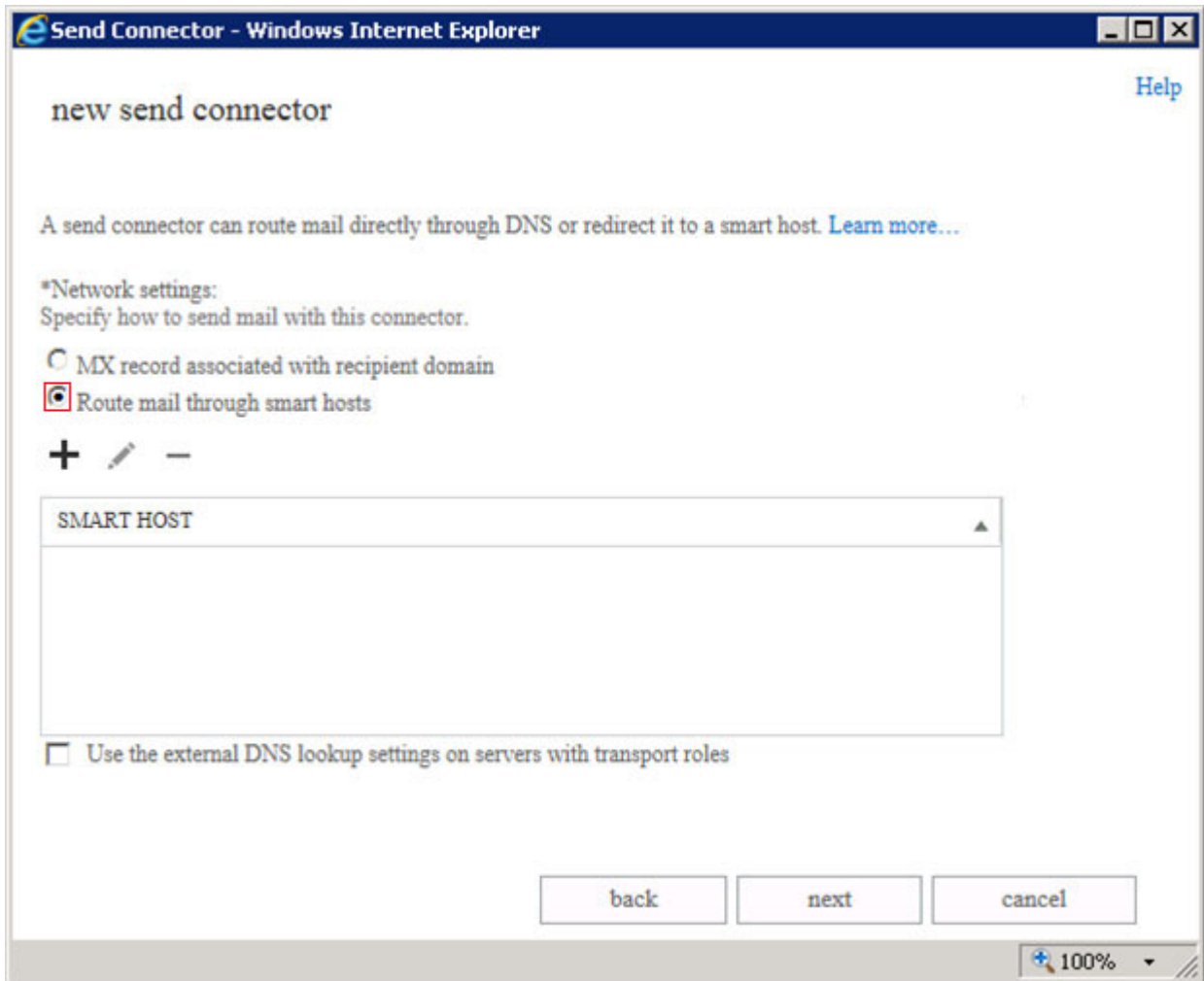
1. Log in to the EAC, click **mail flow** in the left pane, select **send connectors** at the top of the page, and then click the **+** symbol to create a new send connector:



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



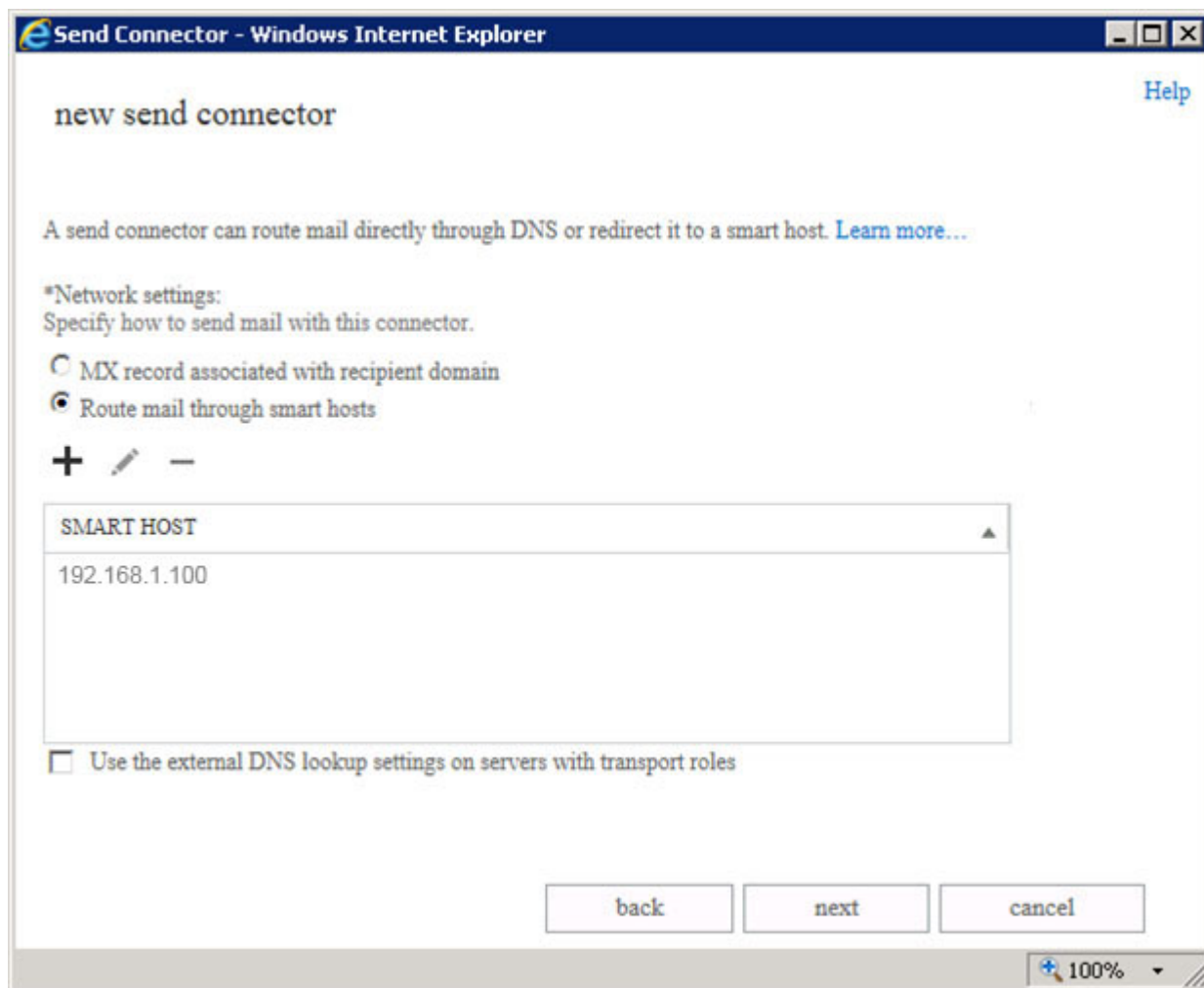
3. Click **next**. In the **Network settings** page, select **Route mail through smart hosts**:



4. Click **next**. In the **add smart host** page, type the service IP address configured in Step 2. *Configure the Barracuda Load Balancer ADC*, for example, type: 192.168.1.100



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



new send connector

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

+ edit -

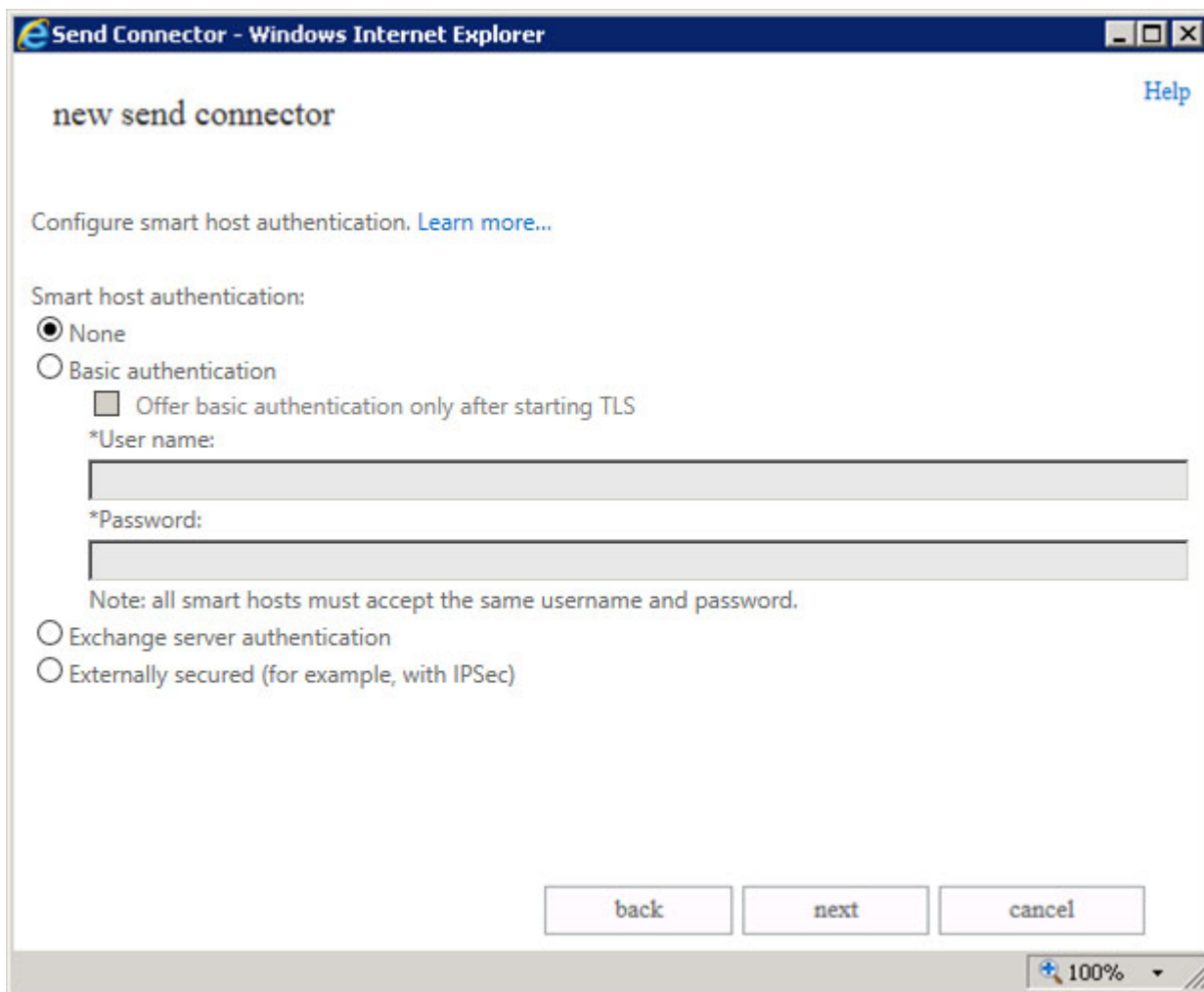
SMART HOST
192.168.1.100

☐ 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**:



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.

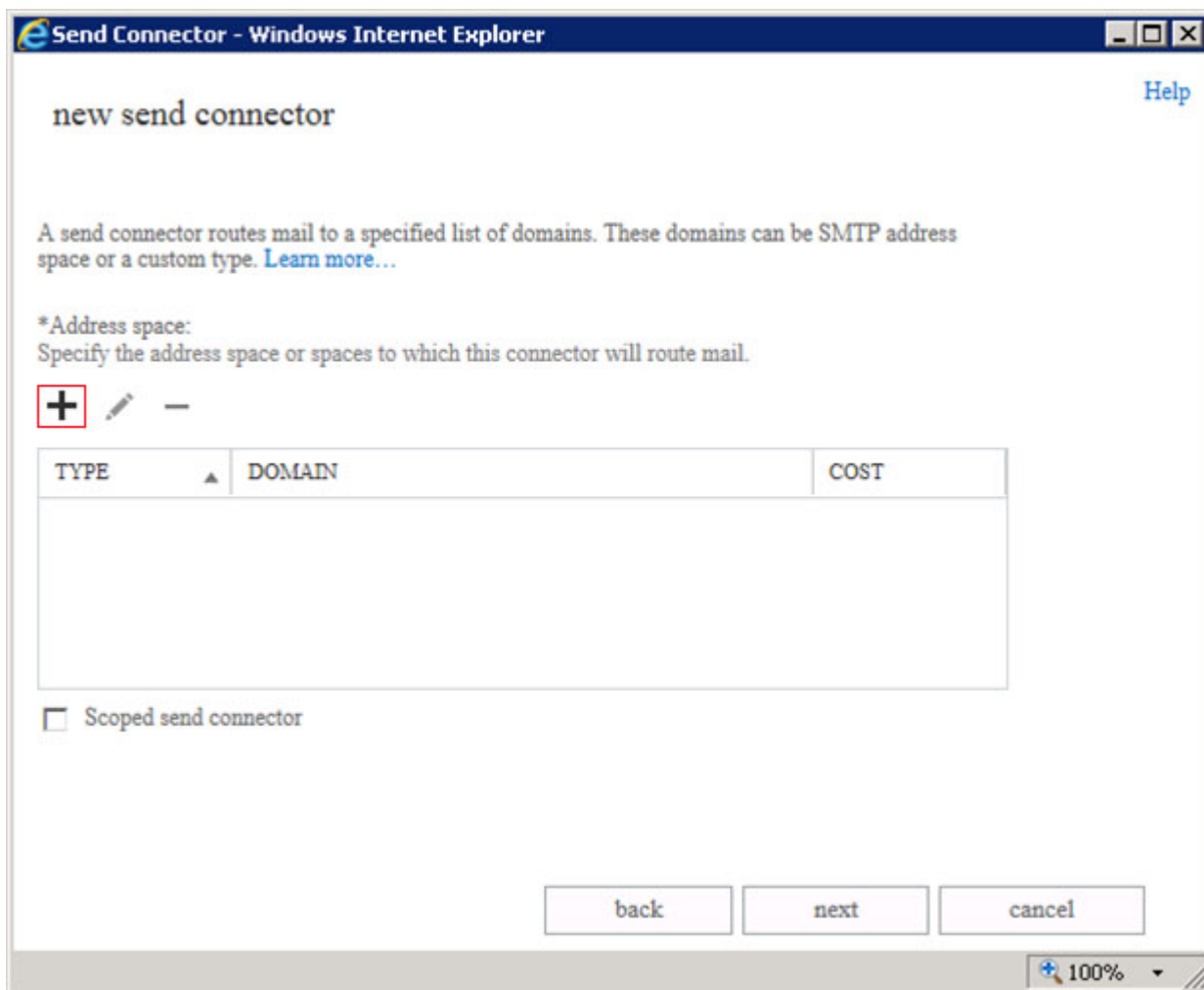
☐ Exchange server authentication

☐ 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.

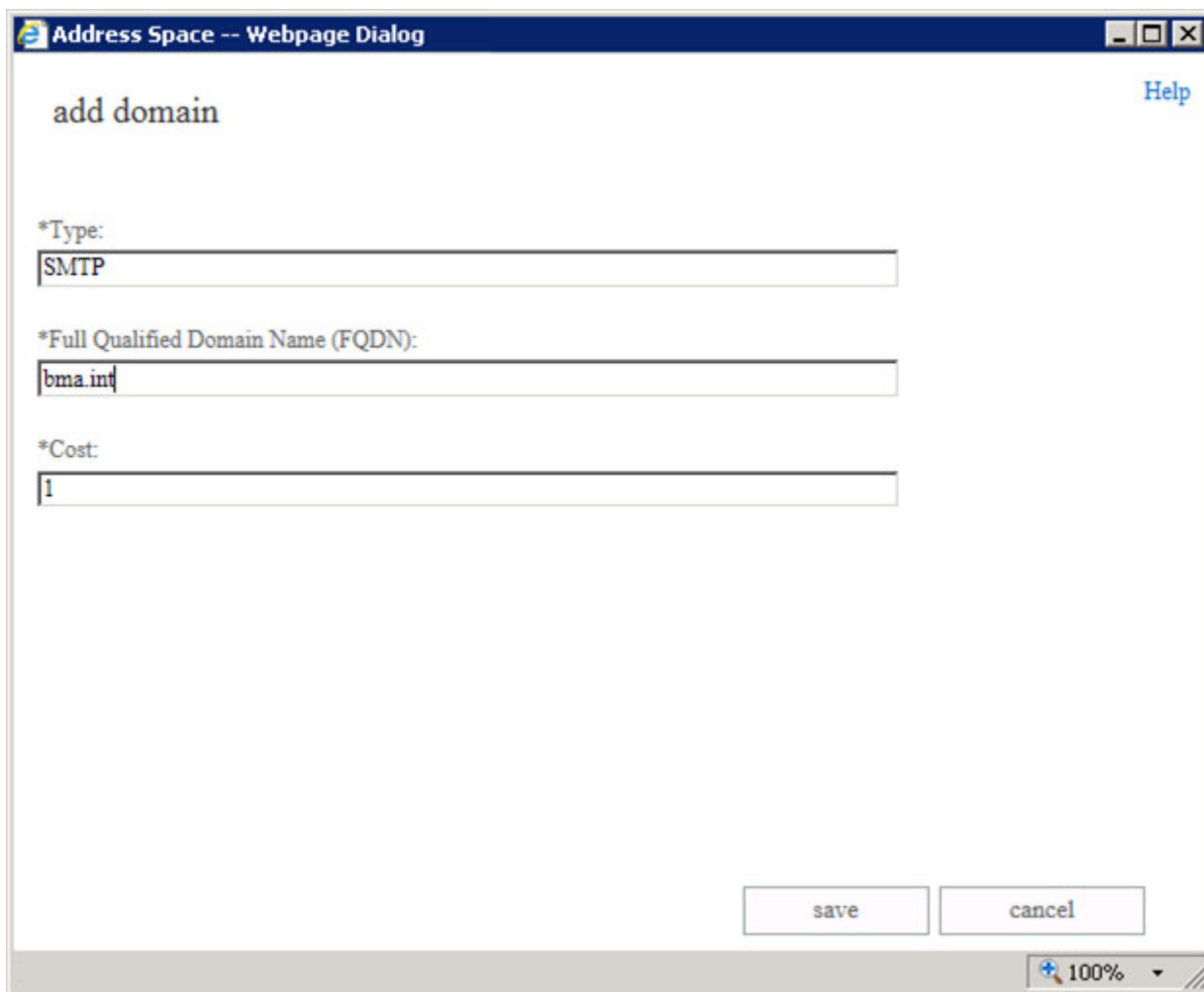
TYPE ▲	DOMAIN	COST
--------	--------	------

☐ 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*):



A screenshot of a web browser window titled "Address Space -- Webpage Dialog". The page has a blue header bar with the title and standard window controls. Below the header, the text "add domain" is displayed in the top left, and a "Help" link is in the top right. The main content area contains 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 form area are two buttons labeled "save" and "cancel". The bottom of the browser window shows a status bar with a zoom icon, "100%", and a close button.

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 with three columns: 'TYPE', 'DOMAIN', and 'COST'. The table has one row with 'SMTP' in the TYPE column, 'bma.int' in the DOMAIN column, and '1' in the COST column. Above the table are icons for adding (+), editing (pencil), and deleting (-) entries. 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 three 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"/>

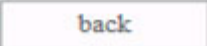
new send connector [Help](#)

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.

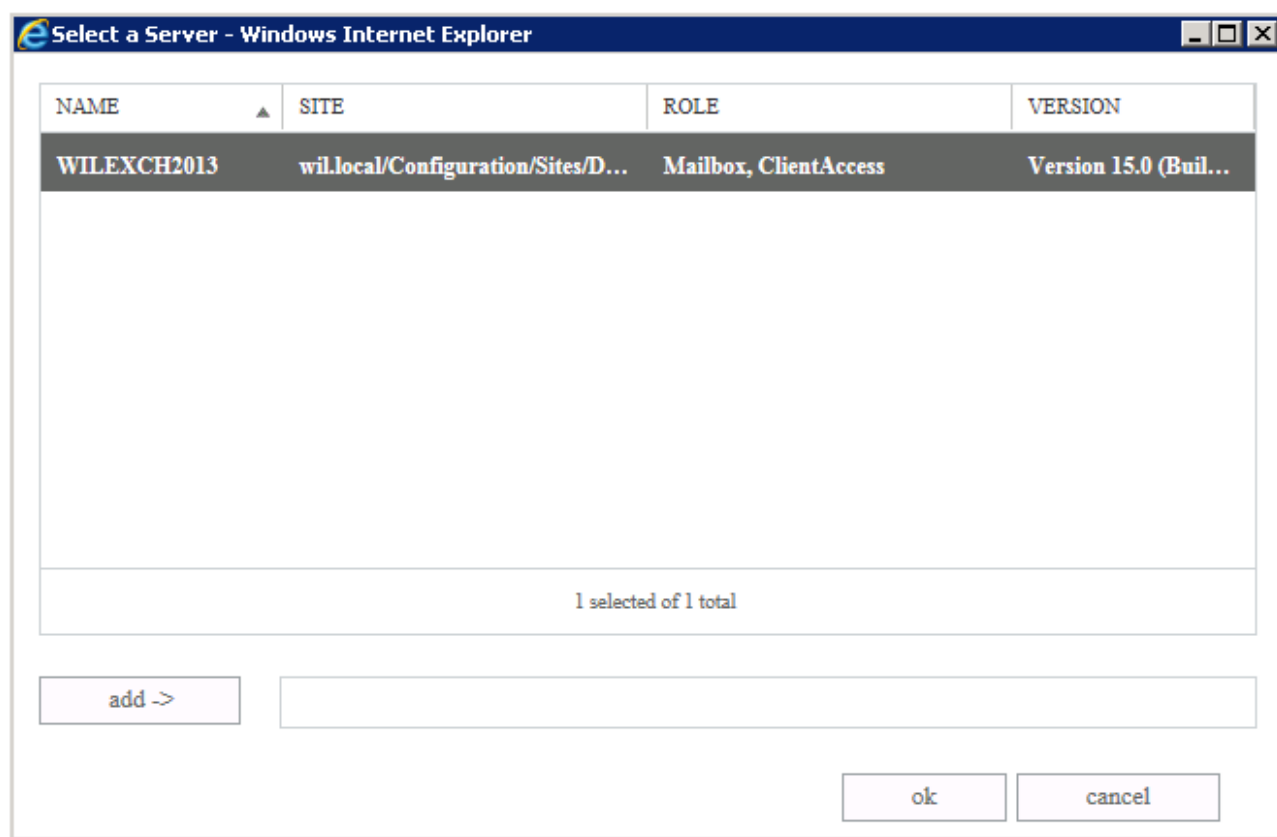
 

SERVER	SITE	ROLE
--------	------	------

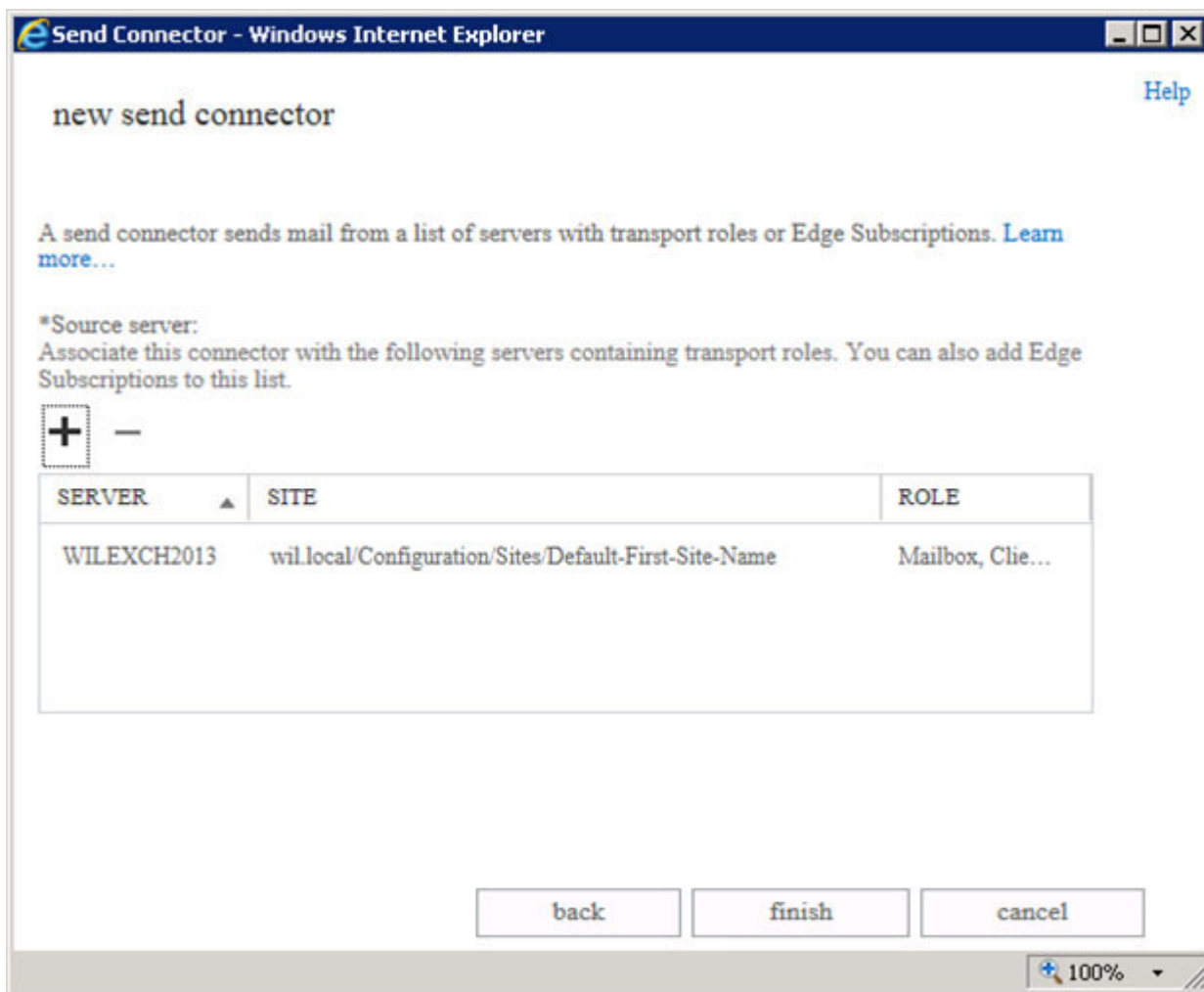
  

 100%

11. Verify all of the appropriate Exchange Servers are listed; click **add** to add additional servers:



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



new send connector [Help](#)

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

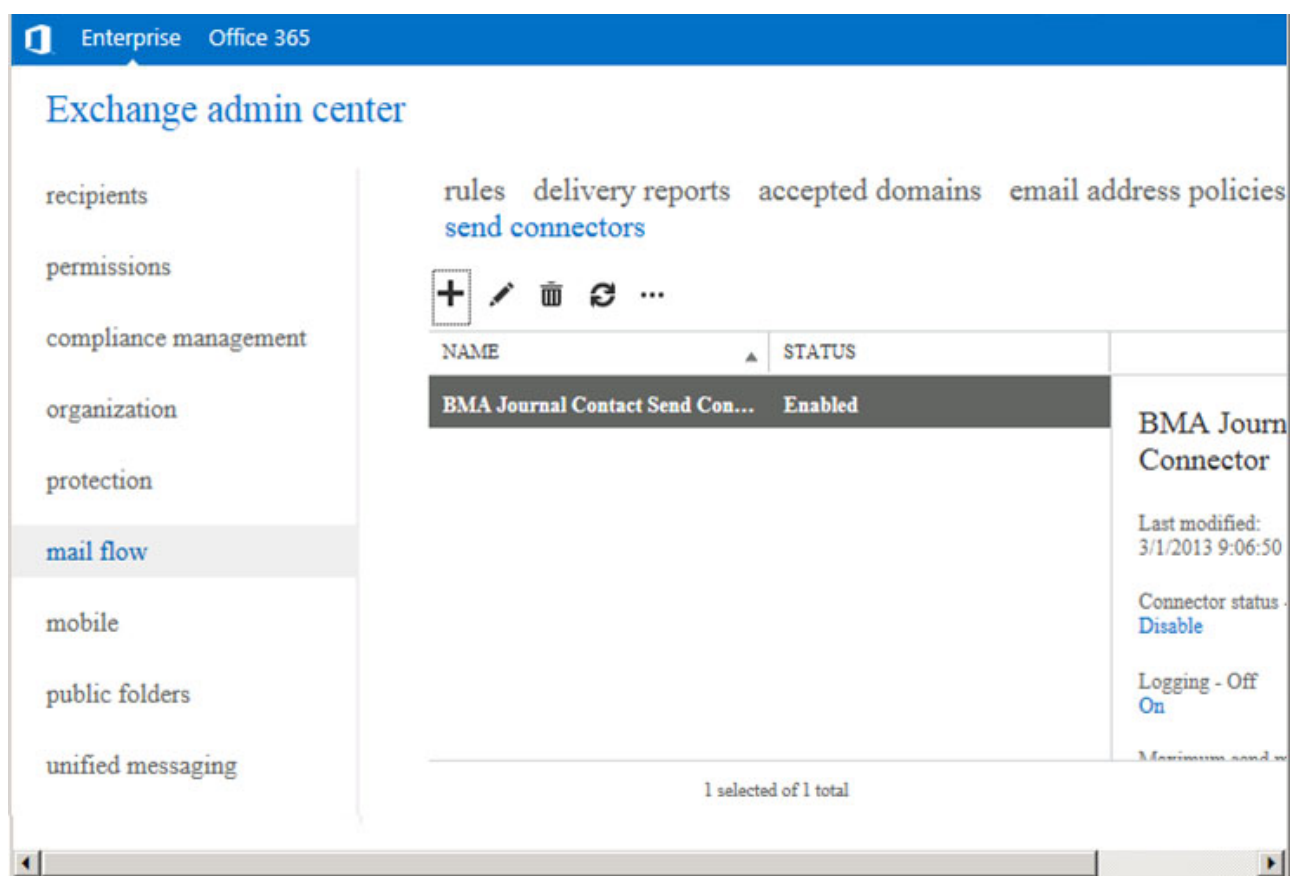
*Source server:
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

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

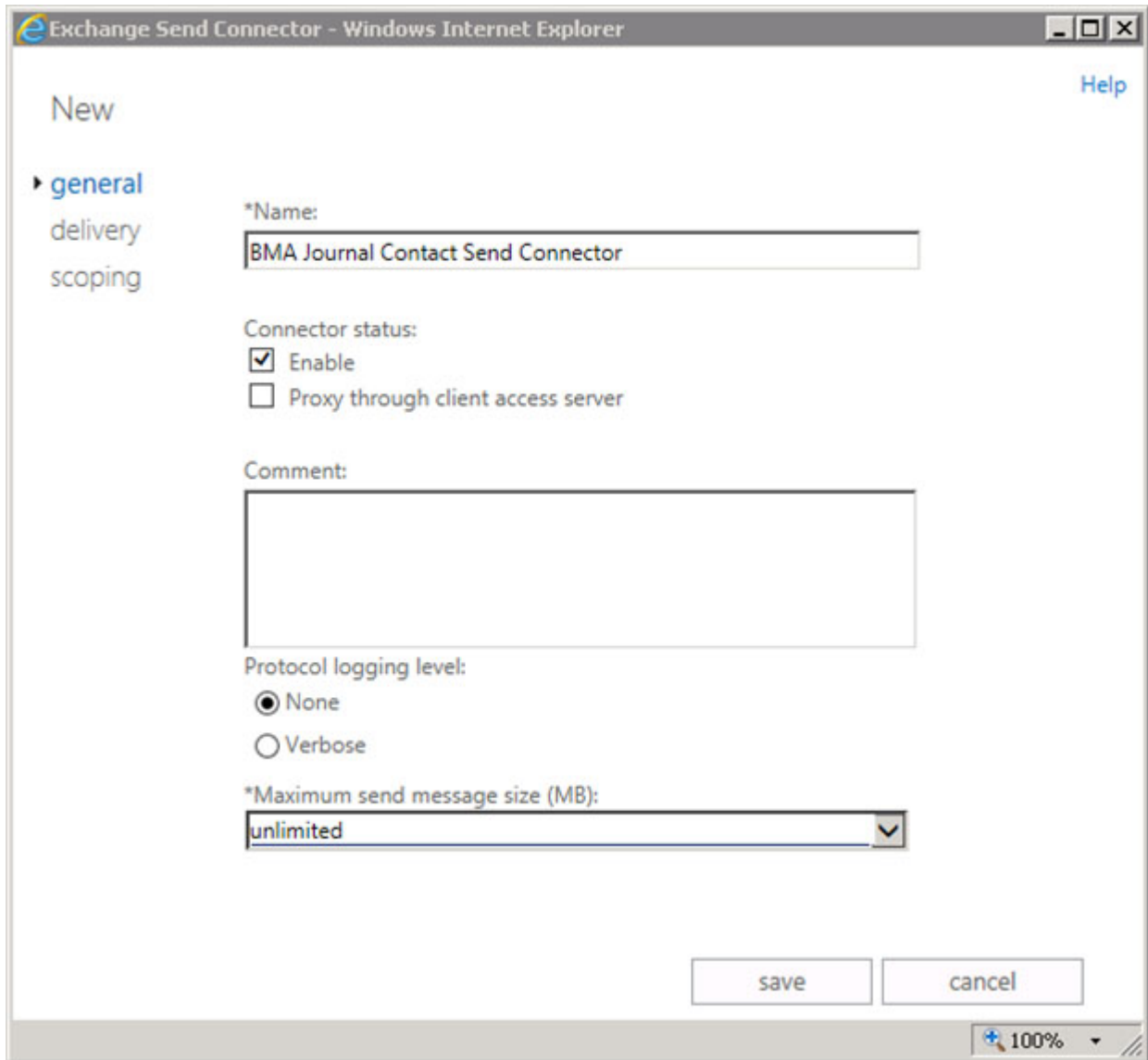
[back](#) [finish](#) [cancel](#)

100%

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



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



Step 5. Set Up Mailbox Database Journaling

Use the following steps to set up mailbox database journaling:

Important

You must complete *all* of the steps in this section for *each* Exchange Email Database.

1. Log into the EAC, click **servers** in the left pane, select **database** at the top of the page, and then click the **Edit** () icon to edit the database properties:

EnterpriseOffice 365

Exchange admin center

recipientspermissionscompliance managementorganizationprotectionmail flowmobilepublic foldersunified messaging**servers**hybrid

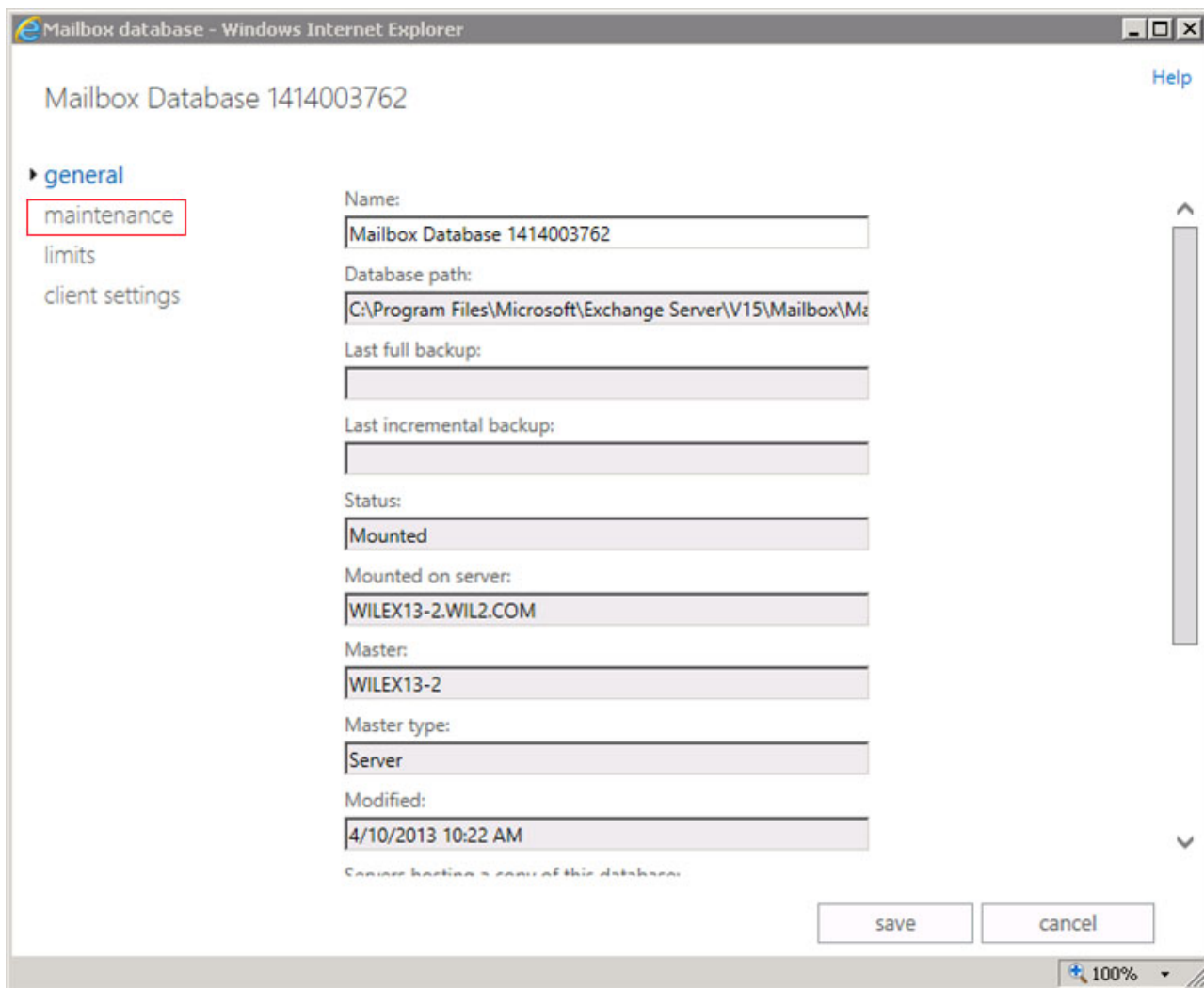
servers**databases**database availability groupsvirtual directoriescertificates

+

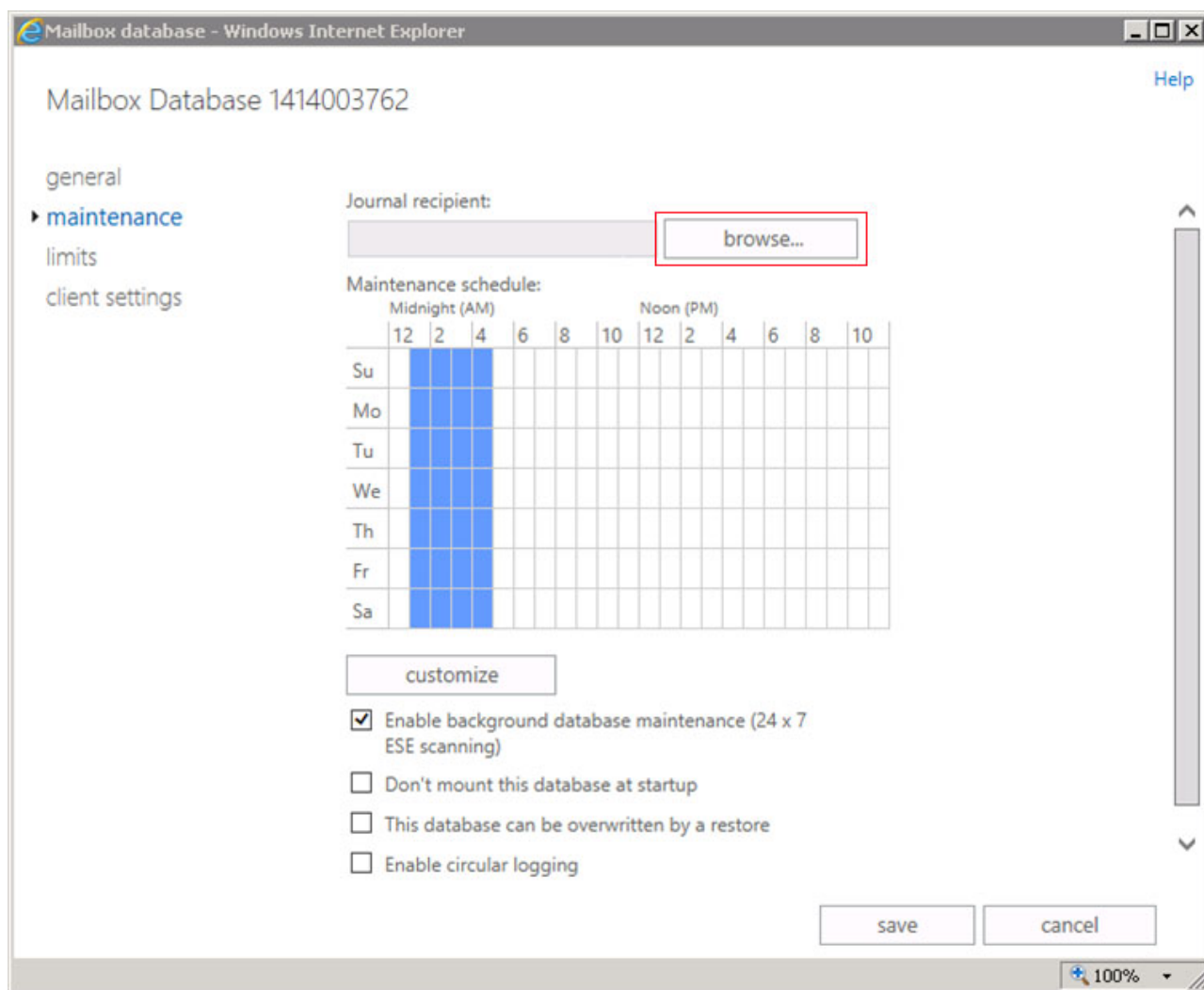
NAME	ACTIVE ON SERVER	SERVICES WITH COPIES	STATUS	BAD COPY COUNT	
Mailbox Database 141...	WILEX13-2	WILEX13-2	Mounted	0	Mailbox Database 141... ServersWILEX13-2Database copies:Mailbox Database 141...Active MountedCopy queue length: 0Content index state: HView details

1 selected of 1 total

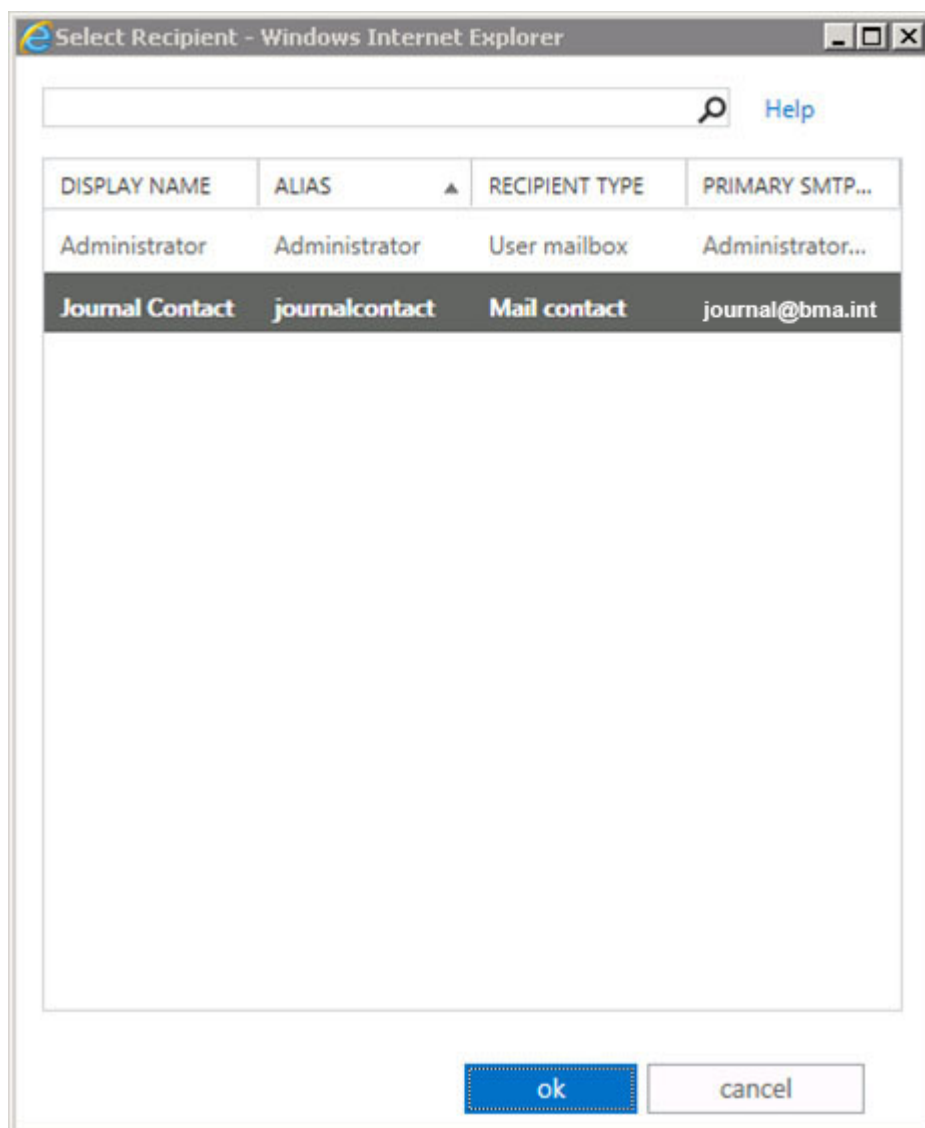
2. In the **Properties** page, click **maintenance** in the left pane:



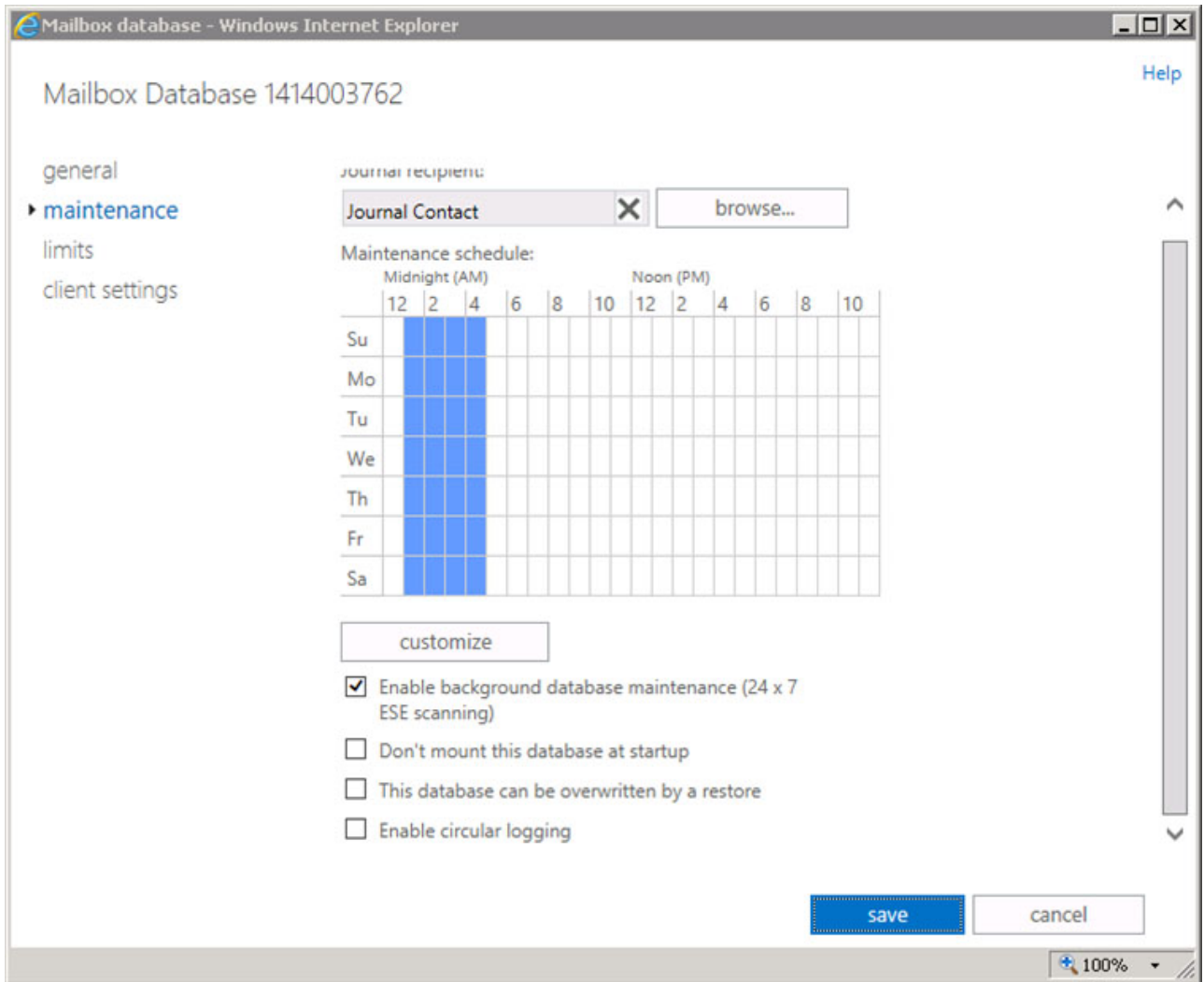
3. In the **maintenance** page, click **browse** following the **Journal recipient** field:



4. Navigate to and select the destination location for journaled messages, for example, **journal@bma.int**:



5. Click **ok** to select the journal message recipient. The recipient displays in the **maintenance** page:



6. Click **save** to save your settings.

The configuration is now complete and journaled mail is forwarded to the Barracuda Message Archiver. Log in to 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.

Barracuda Networks recommends hiding the Journal Contact—as well as any mailbox set up for undeliverable journal reports—from the Global Address List (GAL) so that mail is not sent directly to these accounts.

Configure Envelope Journaling for Microsoft Exchange Server 2013 and Newer - Premium

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 "fake" Domain Name that is used. You can use bma.int or create your own "fake" Domain Name. Note that this Domain Name is used when creating the **Mail Contact** in *Step 4. Create a Send Connector for the Remote Domain*.

1. Open the **Exchange Management Shell**.
2. Execute the following command to create the remote domain; this command ensures TNEF encoding is disabled and auto-forwarding is enabled:

```
New-RemoteDomain -DomainName bma.int -Name "Message Archiver Domain"  
Get-RemoteDomain | Where {$_.DomainName -eq "bma.int"} | Set-RemoteDomain -TNEFEnabled $false -AutoForwardEnabled $true
```
3. Enter the following command to verify the settings:

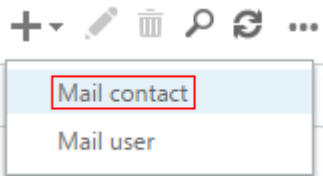
```
Get-RemoteDomain | Where {$_.DomainName -eq "bma.int"} | Format-table  
Name, DomainName, TNEFEnabled, AutoForwardEnabled
```

This command ensures 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.

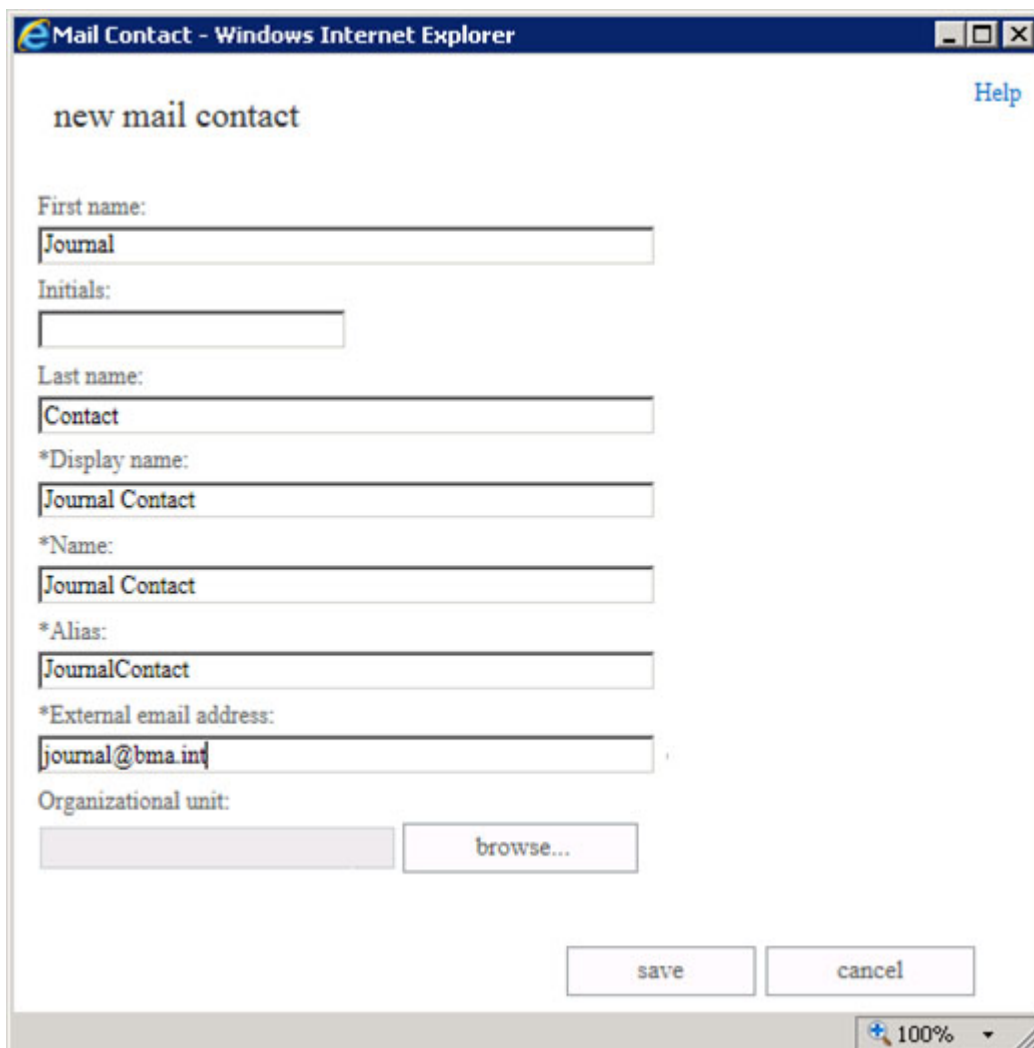
Step 3. Create a Recipient Mail Contact/Alternate Email Address

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 in to the Exchange Admin Center (EAC), and click **recipients > contacts**.
2. Click the + symbol, and click **Mail contact**:



3. In the **new mail contact** dialog box, enter the following details:
 1. **First name** - Type Journal
 2. **Initials** - Leave this field blank
 3. **Last name** - Type Contact
 4. **Display name** - This field populates automatically
 5. **Alias** - Type JournalContact
 6. **External email address** - Type journal@bma.int



Mail Contact - Windows Internet Explorer

new mail contact [Help](#)

First name:

Initials:

Last name:

*Display name:

*Name:

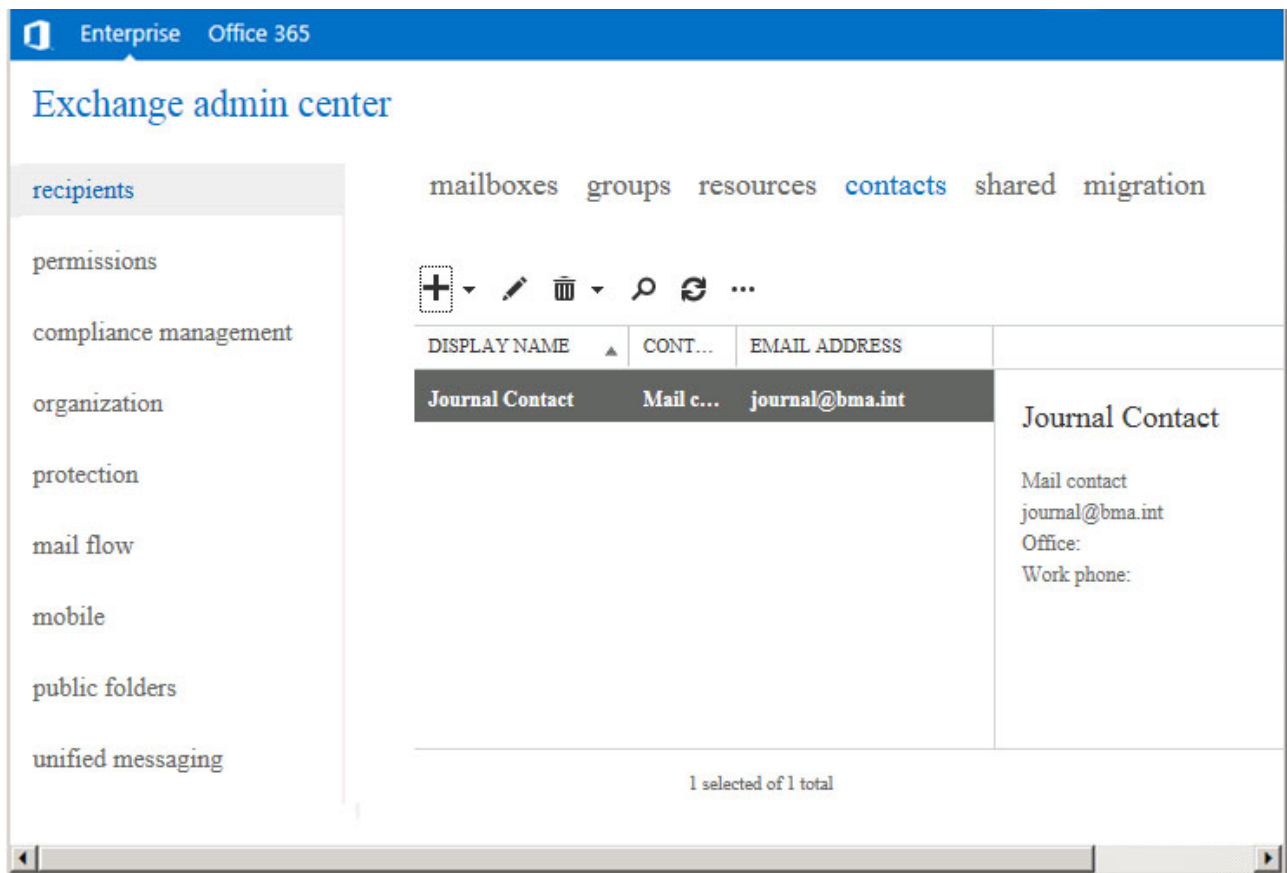
*Alias:

*External email address:

Organizational unit:

100%

4. 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 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
```

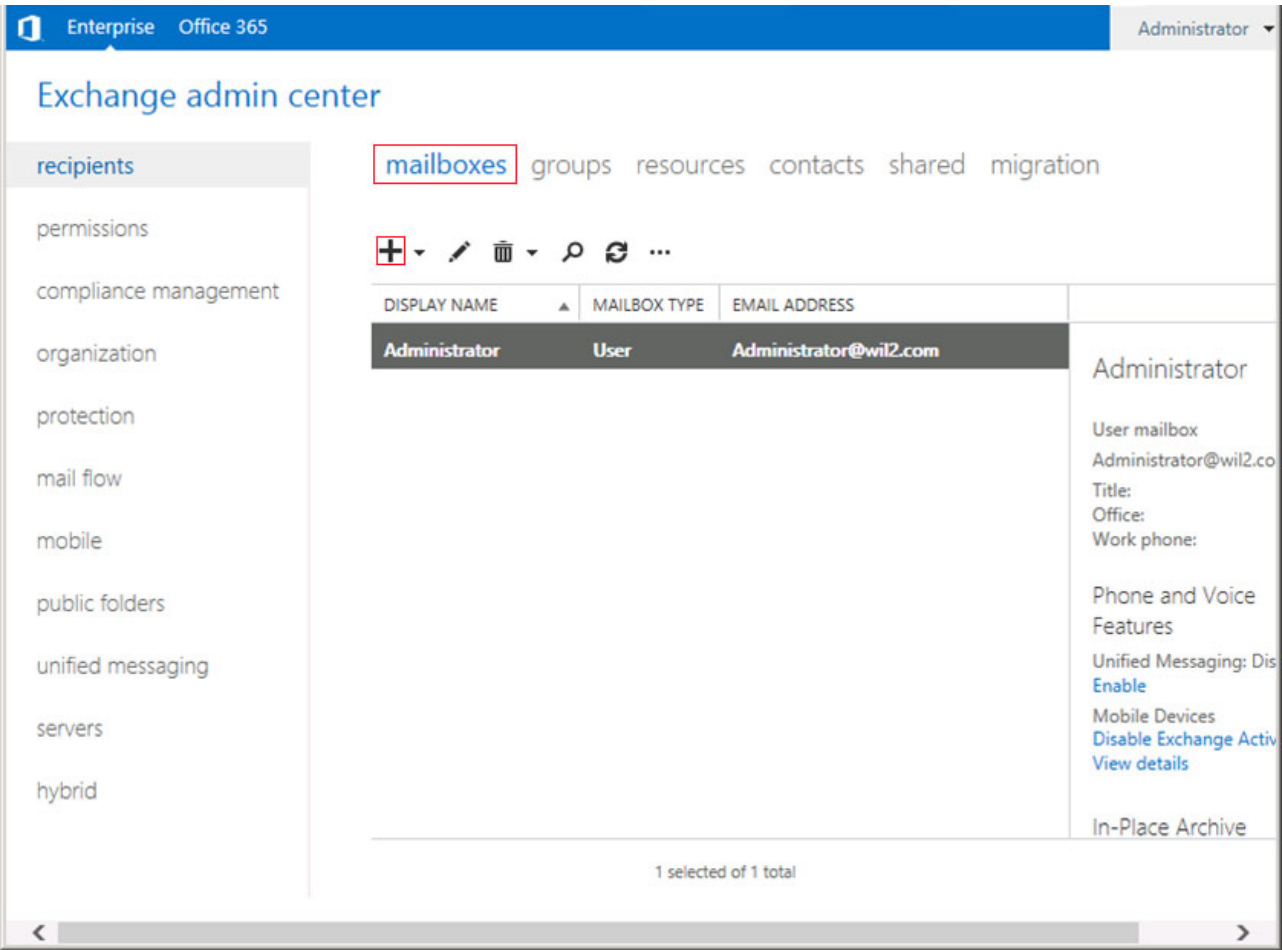
The setting can be verified by executing:

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

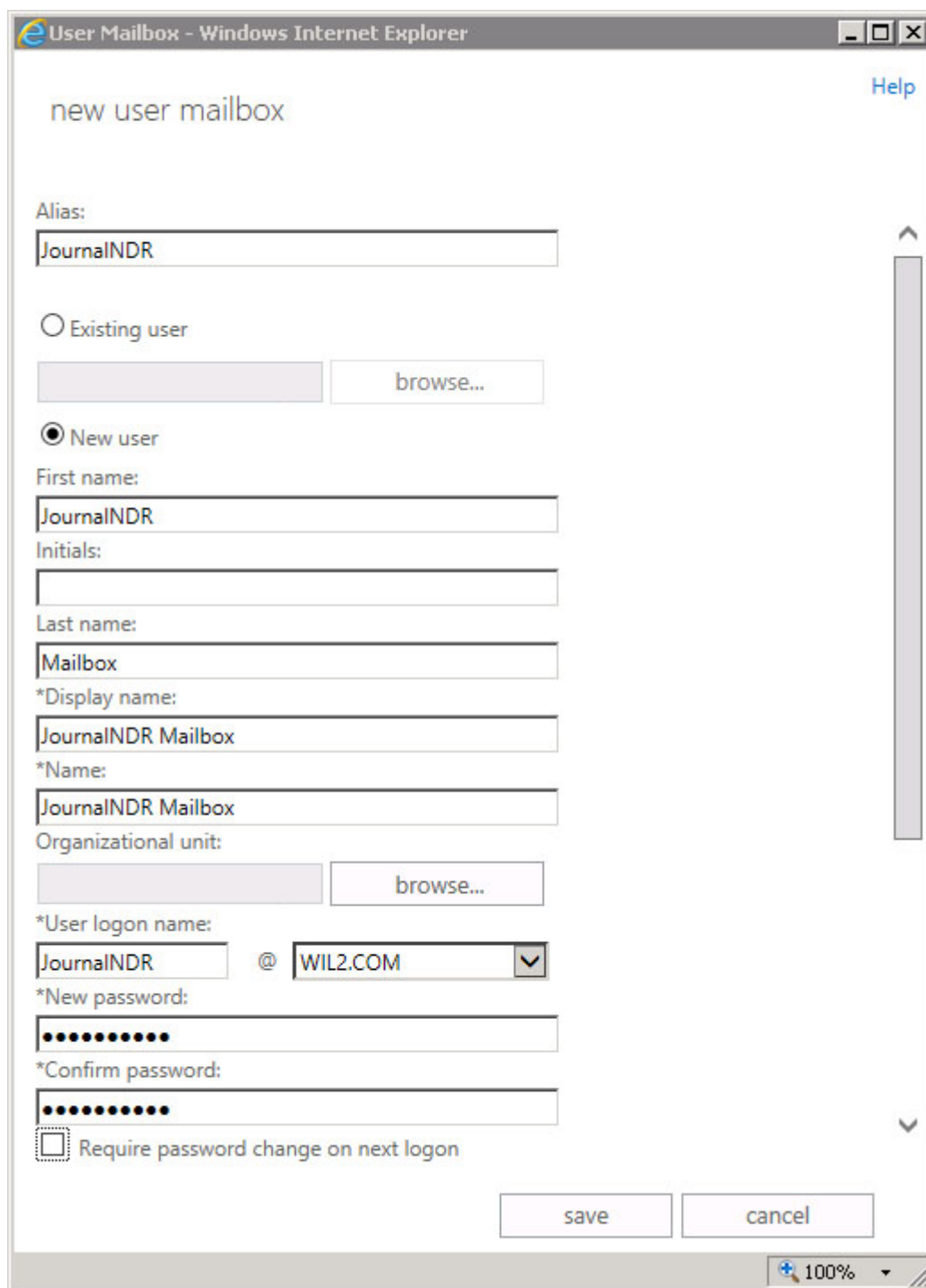
Alternate Journaling Mailbox

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.

5. 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:



6. 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 logon

100%

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

EnterpriseOffice 365Administrator

Exchange admin center

recipientspermissionscompliance managementorganizationprotectionmail flowmobilepublic foldersunified messagingservershybrid

mailboxesgroupsresourcescontactssharedmigration

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

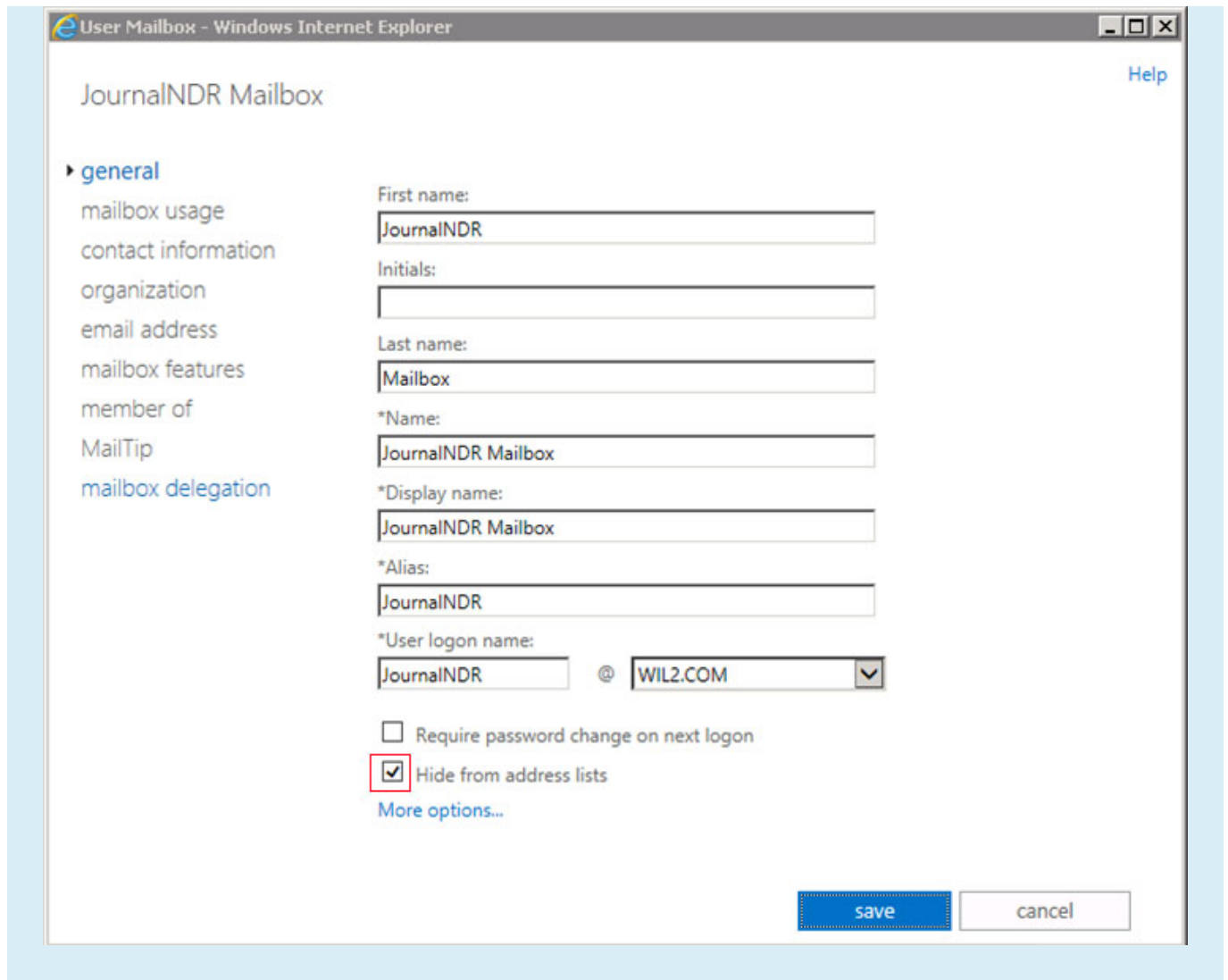
1 selected of 2 total

Hide Alternate Contact from Global Address List

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**:

How to Configure Barracuda Load Balancer ADC with Barracuda Message Archiver for High Availability SMTP Journaling

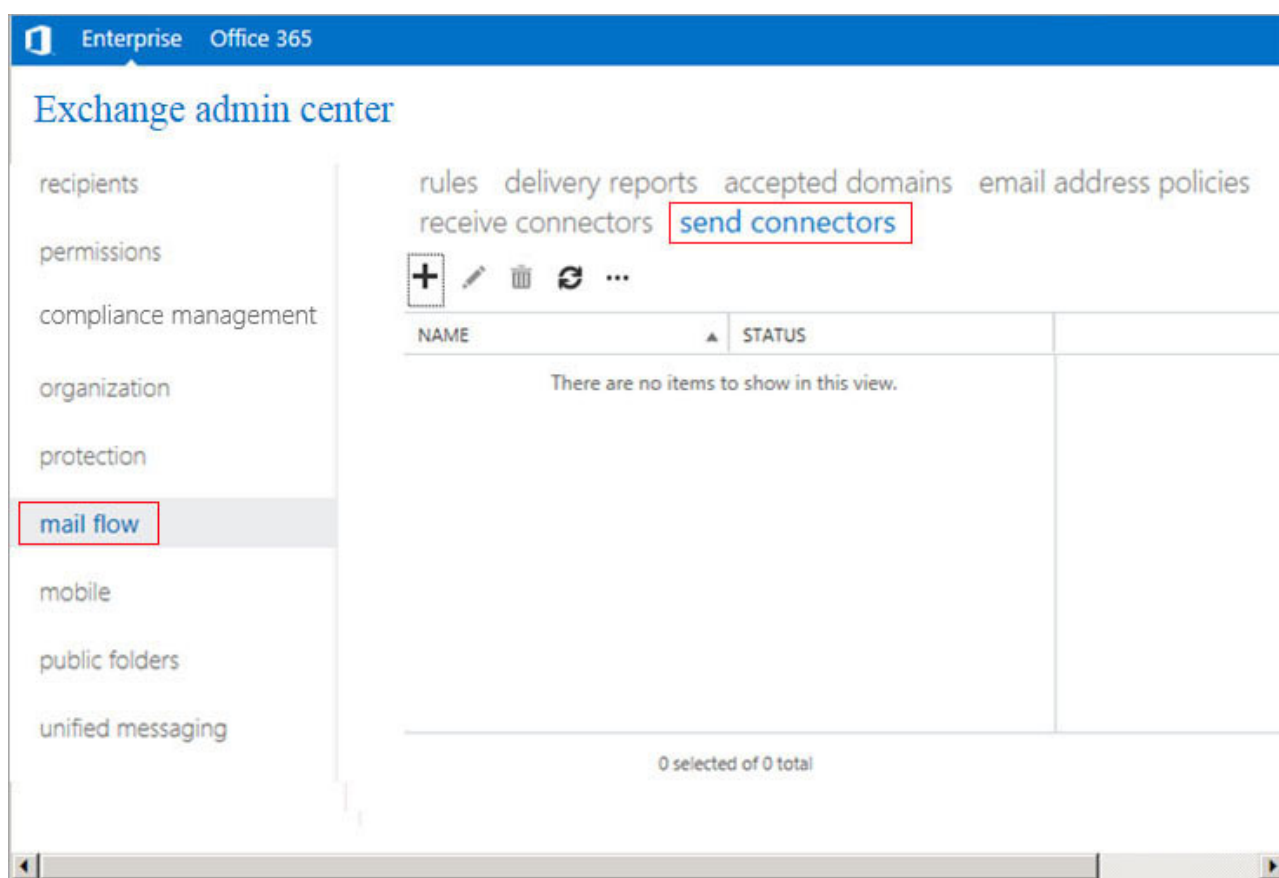
38 / 66



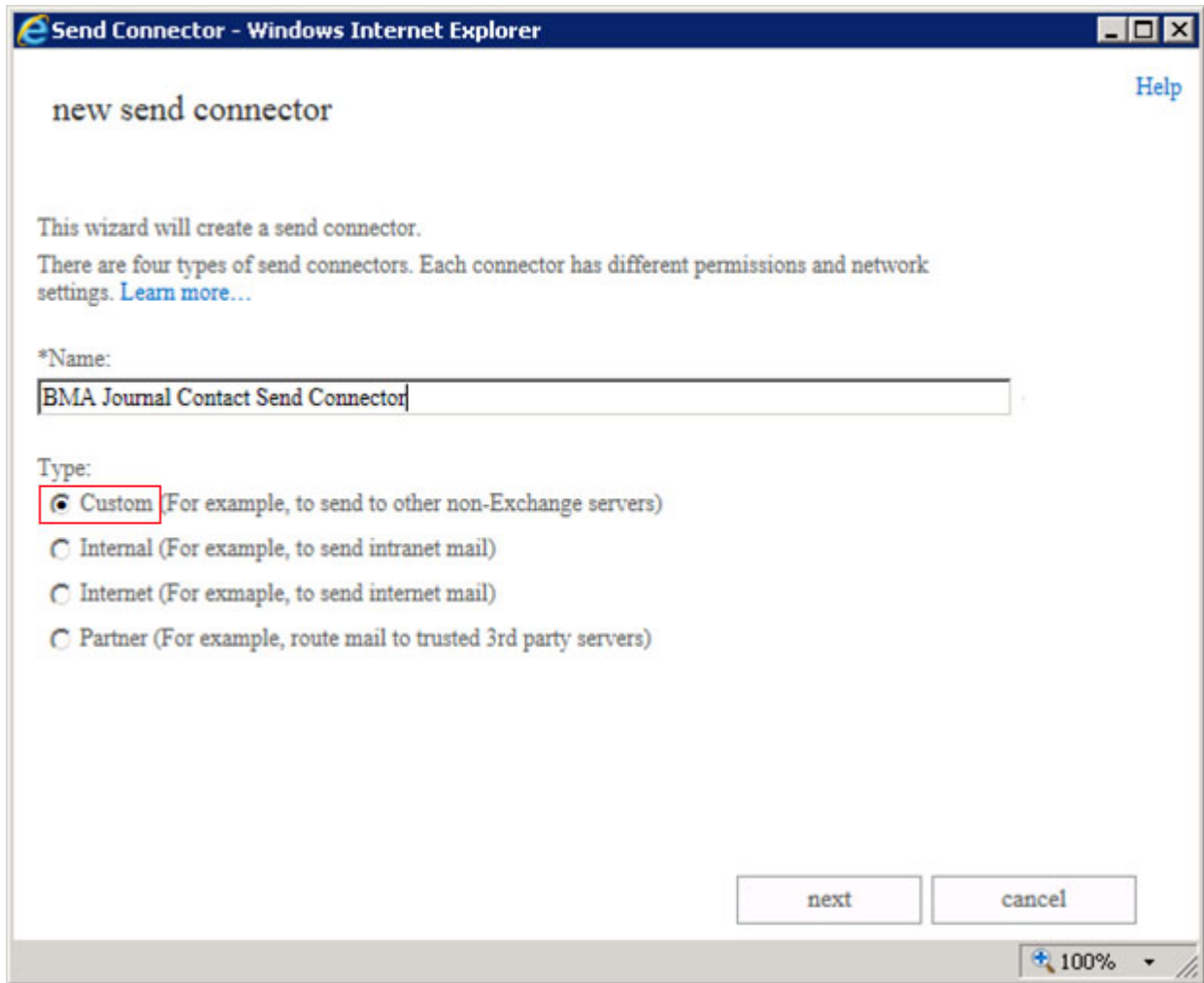
Step 4. Create a Send Connector for the Remote Domain

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**:



Send Connector - Windows Internet Explorer

new send connector [Help](#)

This wizard will create a send connector.

There are four types of send connectors. Each connector has different permissions and network settings. [Learn more...](#)

*Name:

Type:

☒ Custom (For example, to send to other non-Exchange servers)

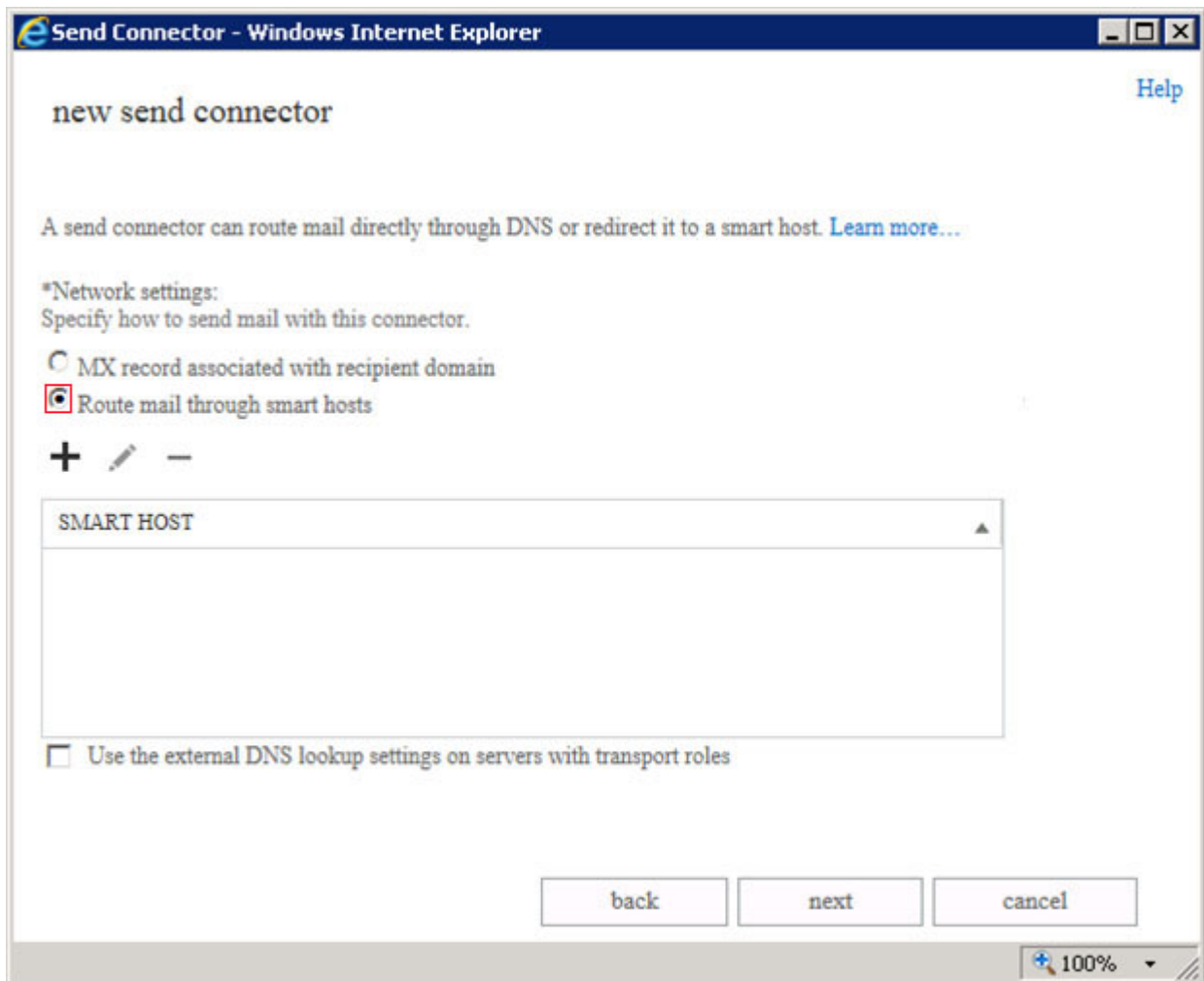
☐ Internal (For example, to send intranet mail)

☐ Internet (For example, to send internet mail)

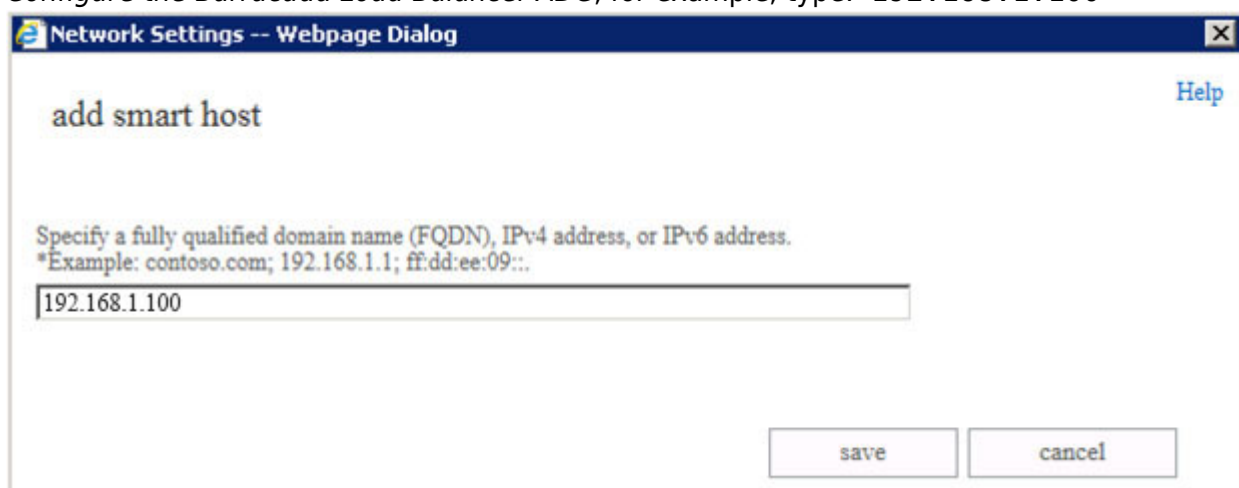
☐ Partner (For example, route mail to trusted 3rd party servers)

100%

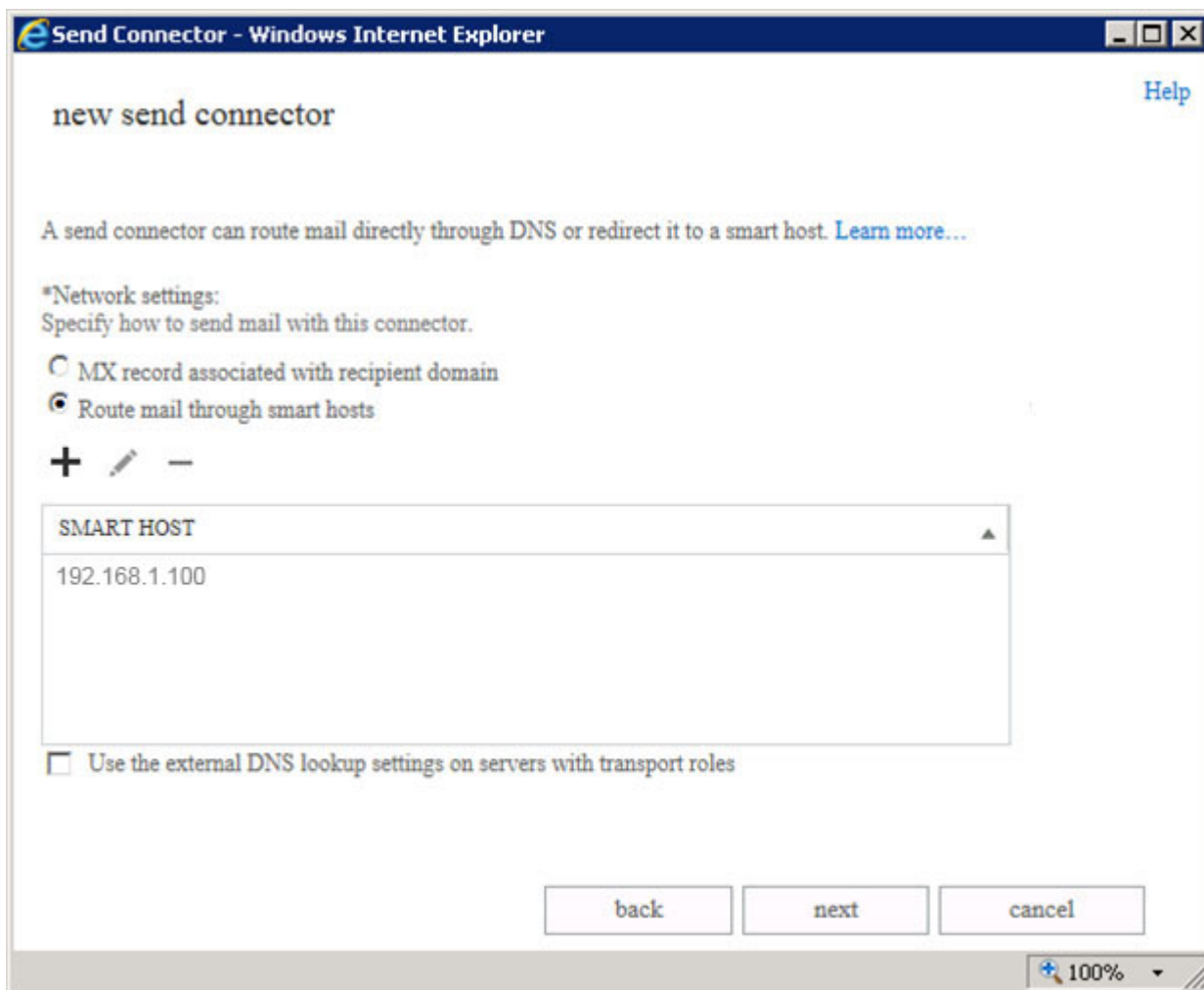
3. Click **next**. In the **Network settings** page, select **Route mail through smart hosts**:



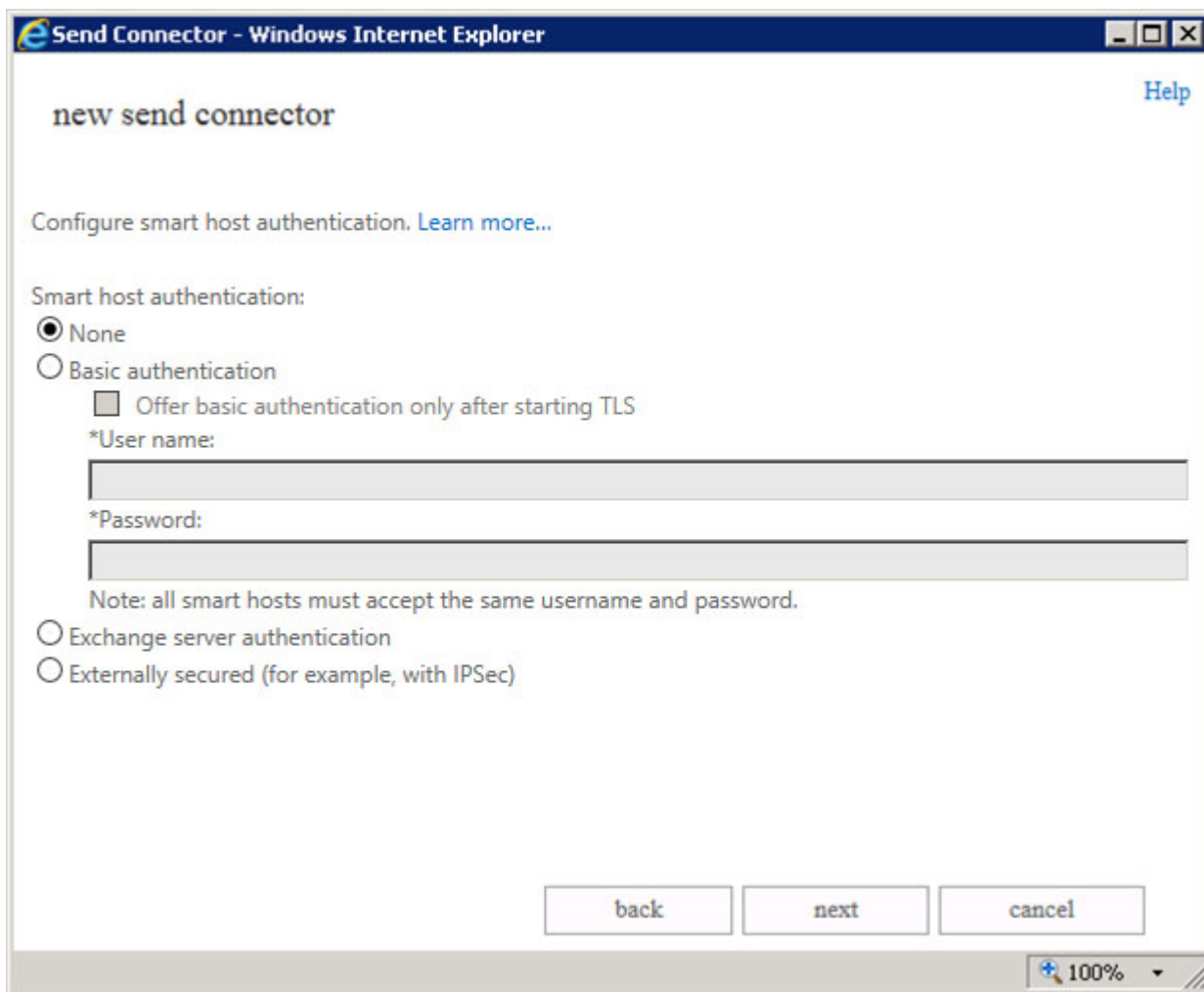
4. Click **next**. In the **add smart host** page, type the service IP address configured in Step 2. *Configure the Barracuda Load Balancer ADC*, for example, type: 192.168.1.100



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



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**:



new send connector

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.

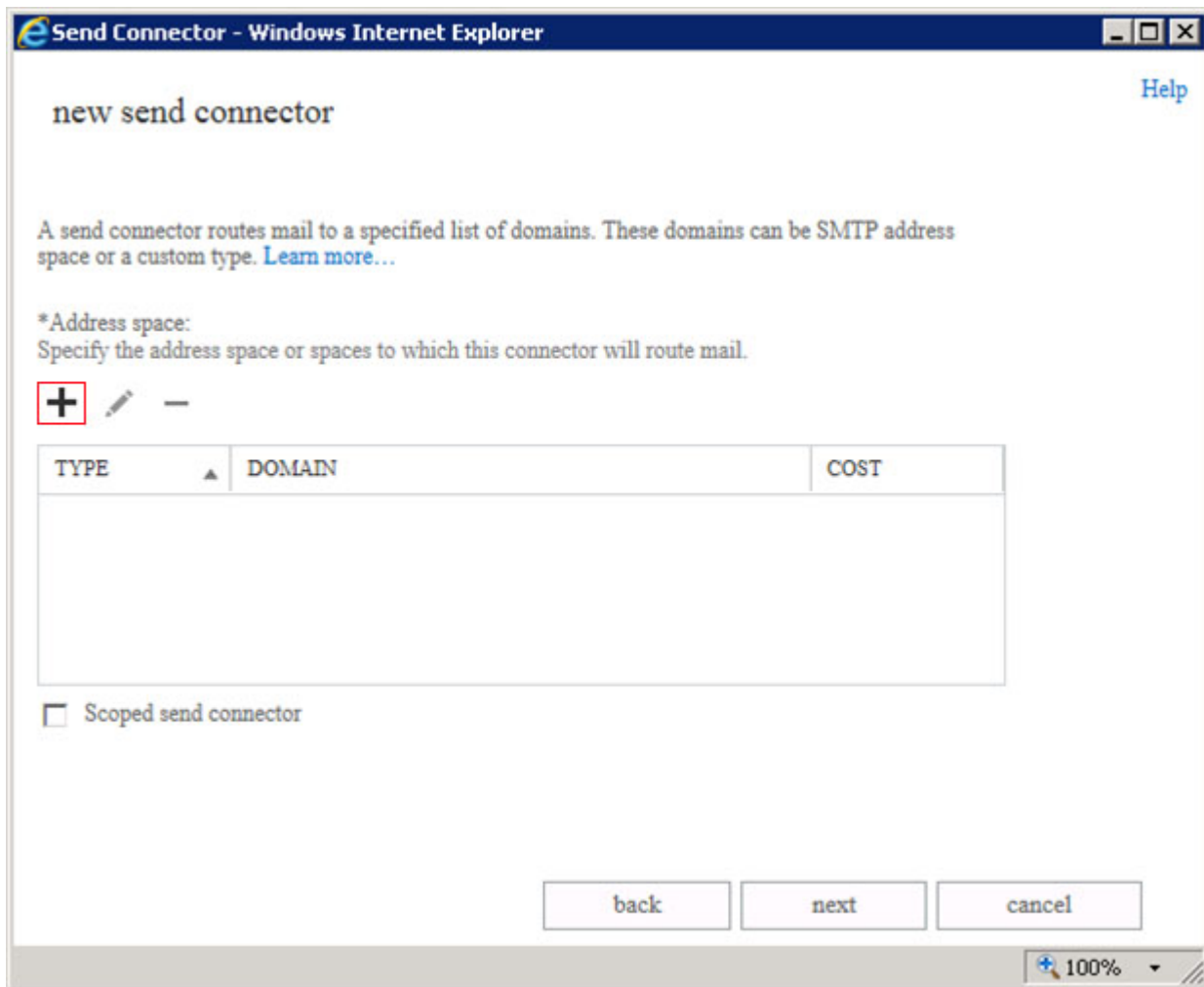
☐ Exchange server authentication

☐ Externally secured (for example, with IPSec)

back next cancel

100%

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



Send Connector - Windows Internet Explorer

new send connector

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.

+ ✎ -

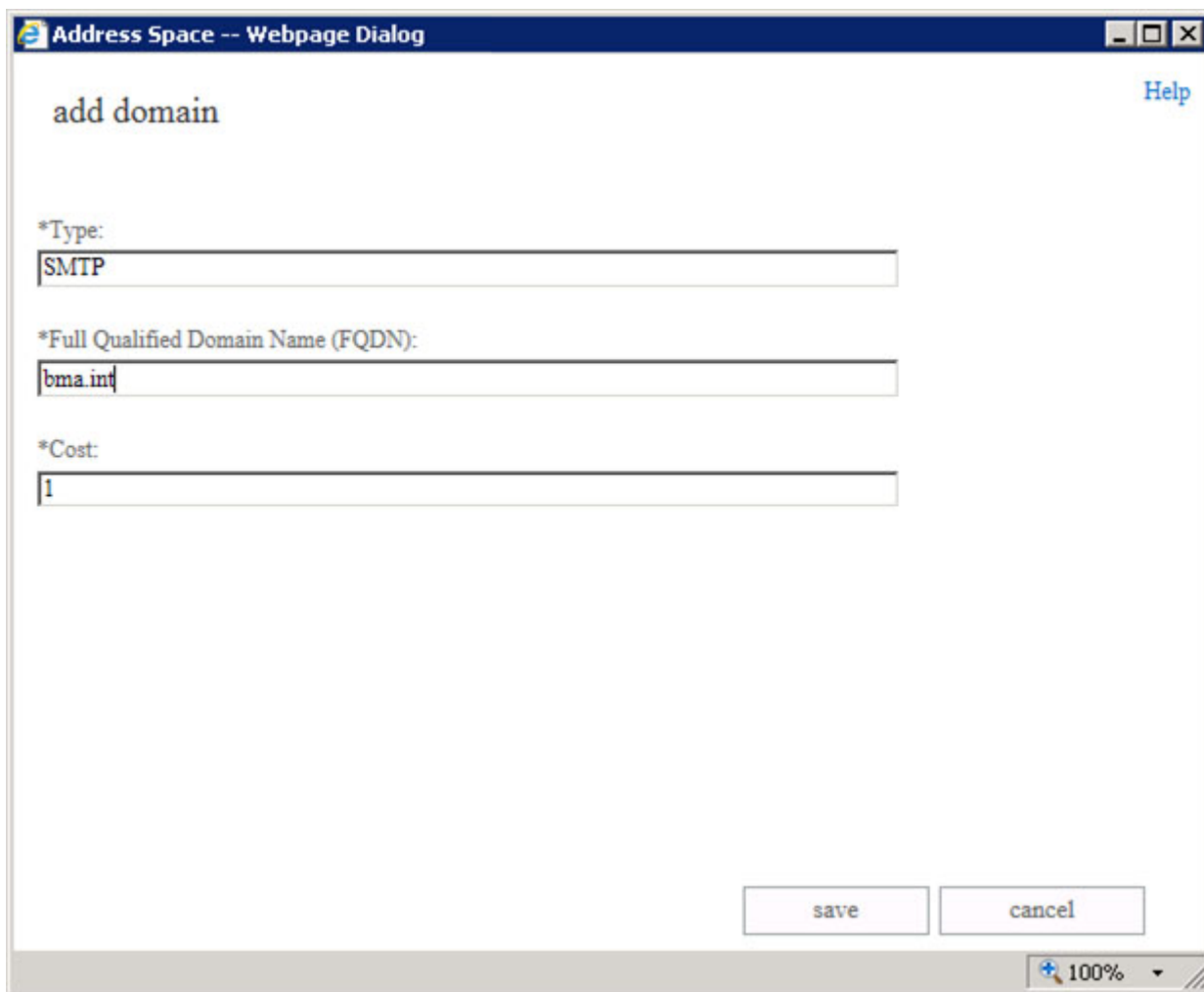
TYPE	DOMAIN	COST
------	--------	------

☐ 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*):



A screenshot of a web browser window titled "Address Space -- Webpage Dialog". The page has a blue header bar with the title and standard window controls. Below the header, the text "add domain" is displayed in the top left, and a "Help" link is in the top right. The main content area contains three labeled input fields: "*Type:" with a dropdown menu showing "SMTP", "*Full Qualified Domain Name (FQDN):" with a text input containing "bma.int", and "*Cost:" with a text input containing "1". At the bottom right of the form area are two buttons labeled "save" and "cancel". The bottom of the browser window shows a status bar with a zoom icon, "100%", and a close button.

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 (-) address spaces. 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"/>

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"/>

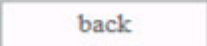
new send connector [Help](#)

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.

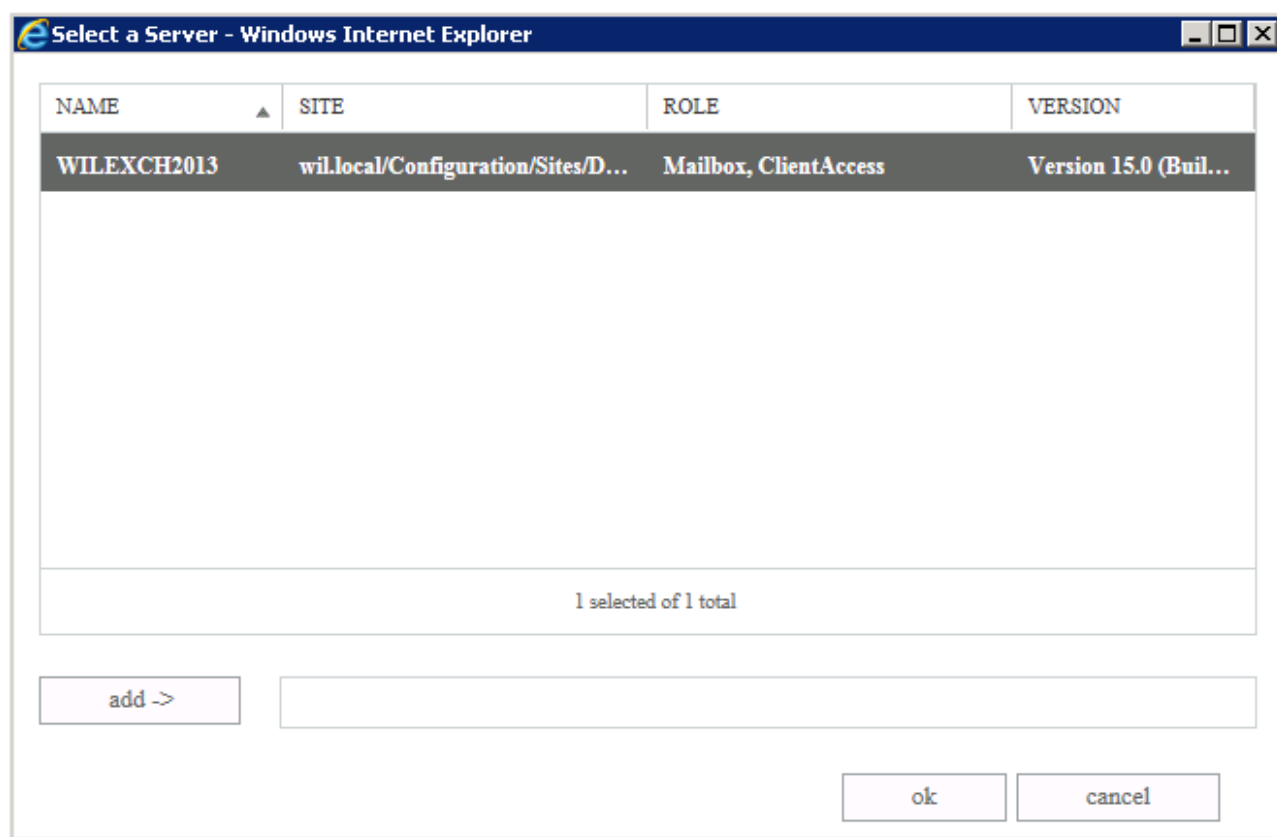
 

SERVER	SITE	ROLE
--------	------	------

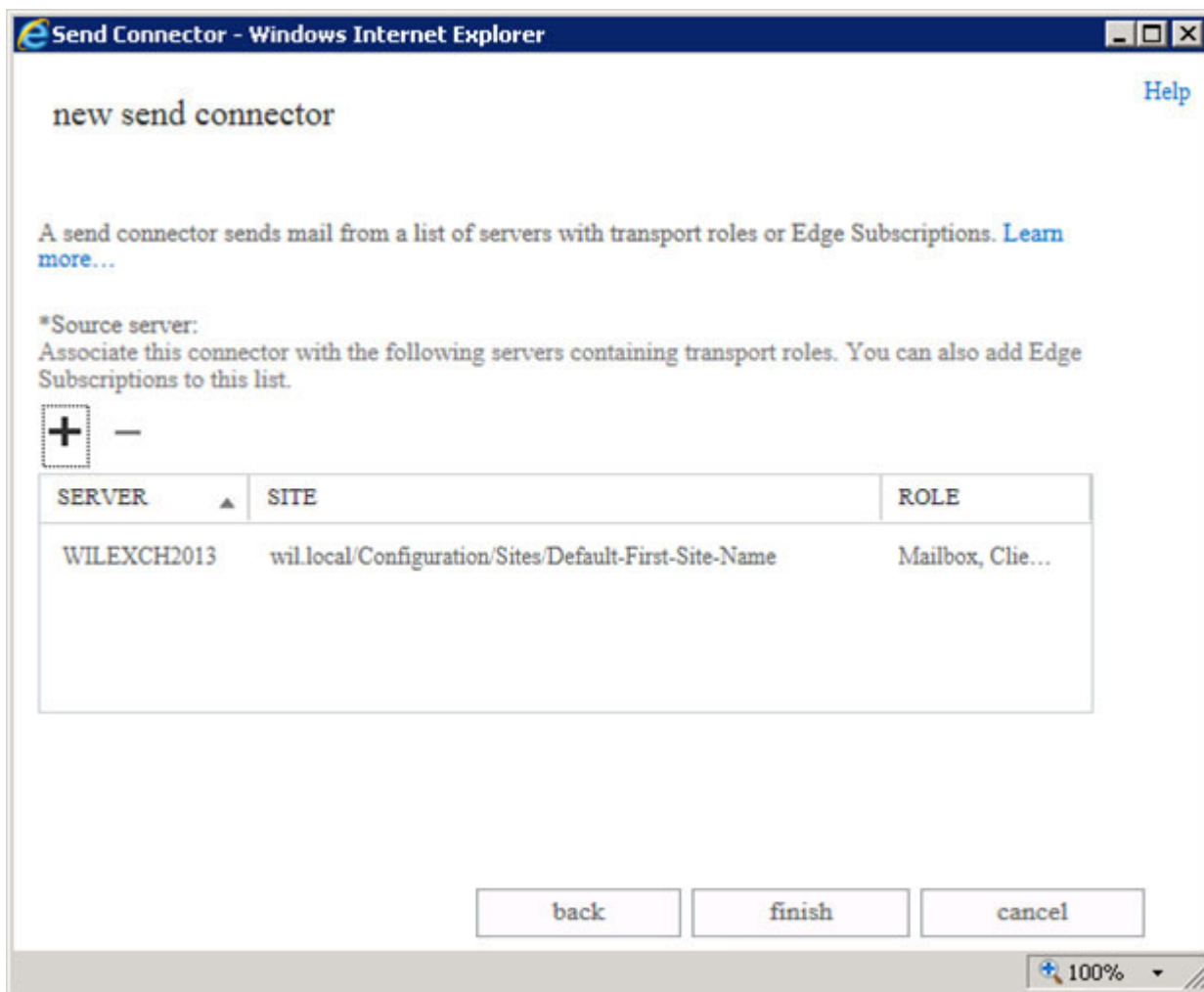
  

 100%

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:



new send connector [Help](#)

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

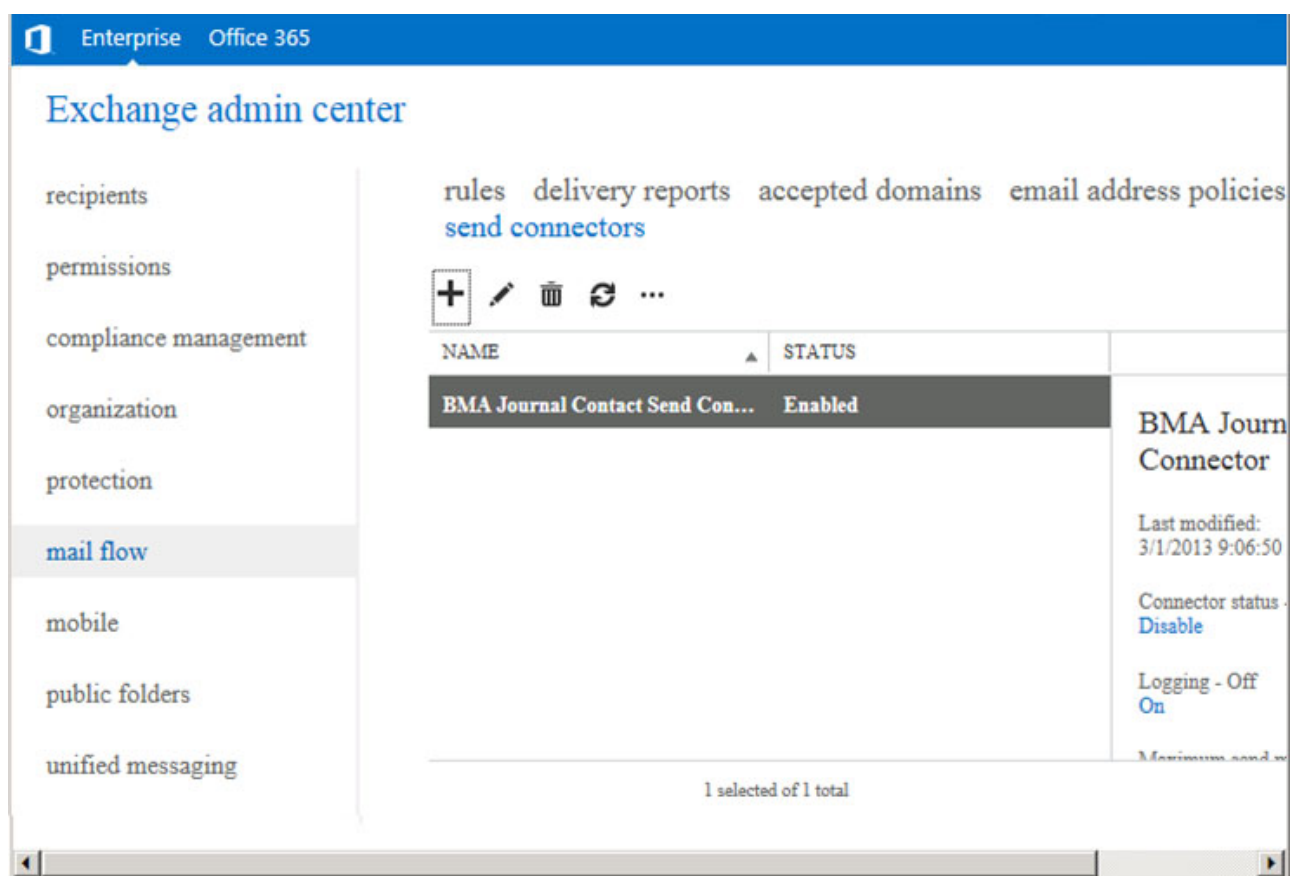
***Source server:**
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

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

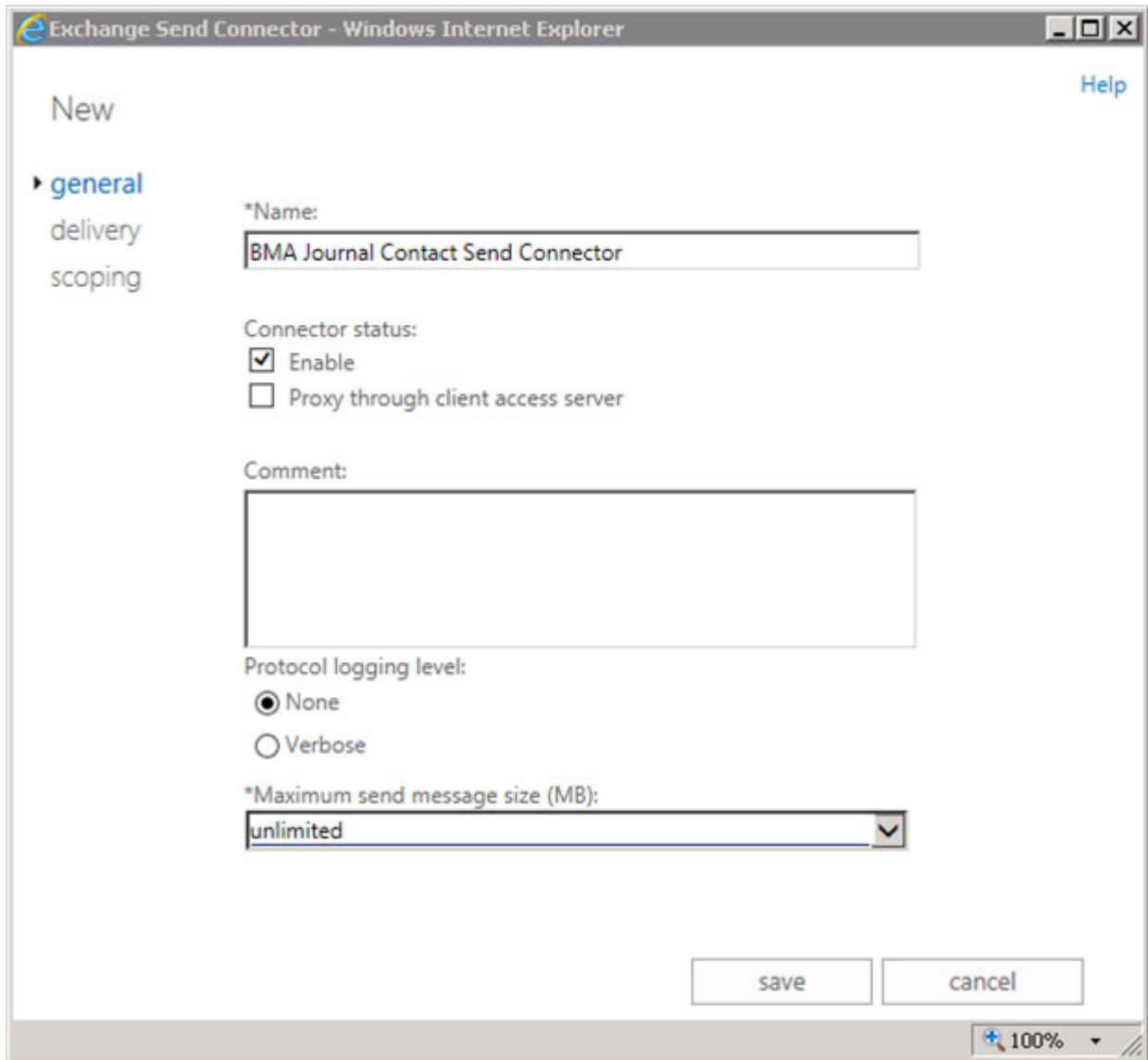
[back](#) [finish](#) [cancel](#)

100%

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



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

Use the following steps to set up a journal rule:

1. Log into the Microsoft Purview compliance portal, navigate to **Solutions > Data lifecycle management > Exchange (legacy) > Journal rules**, and then select **+ New rule**.
2. On the **Define journal rule settings** page, provide a name for the journal rule and then configure the following options:
 1. **Send journal reports to** - Type `journal@[non-routable domain]`. For example, type: `journal@bma.int`
 2. **Journal rule name** - Type **Barracuda Message Archiver Journal Rule**
 3. **Journal messages sent or received from** - Select **Apply to all Messages**.
 4. **Type of message to journal** - Select **All Messages**.
3. Select **Next**, review the settings, and then click **Submit** to create the journal rule.

4. To create an NDR recipient, navigate to **Solutions > Data lifecycle management > Exchange (legacy)**.
5. Click the **Settings** icon.
6. In **Send undeliverable journal reports to**, enter the email address of a valid user account. **Note** that the mailbox must be a mail user, mail contact, or external user, *not* an Exchange Online Mailbox.
7. Click **Save**.

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.

Configure Envelope Journaling for Microsoft Exchange Server 2007 and 2010

Depending on your Client Access Licenses (CALs), you may need to apply these rules at the mail server level rather than the hub transport level. For more information, see the Microsoft TechNet article [Overview of Compliance Features](#).

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

To ensure that journaled message archiving begins as soon as your Exchange Servers are configured to send them, register each Exchange Server as a Trusted SMTP Server with the Barracuda Message Archiver (on the **MAIL SOURCES > SMTP** page) prior to configuring your Exchange Servers. Also see [Understanding SMTP Forwarding and Trusted Servers](#).

Once the Barracuda Message Archiver is configured to receive SMTP traffic, you must complete the following from the Exchange Management Console (EMC) of each Exchange Server that will be journaling directly into the Barracuda Message Archiver:

- **From Recipient Configuration** – Create a Mail Contact that is to act as the recipient of all journaled messages.
- **From Organization Configuration > Hub Transport** – Create the following items:
 - a (non-routable) **Remote Domain**, to act as the recipient domain for journaled traffic
 - a **Send Connector**, for routing journaled messages
 - a **Journaling Rule** to actually enable journaling on your Exchange Server

Step 2. Configure the Barracuda Message Archiver

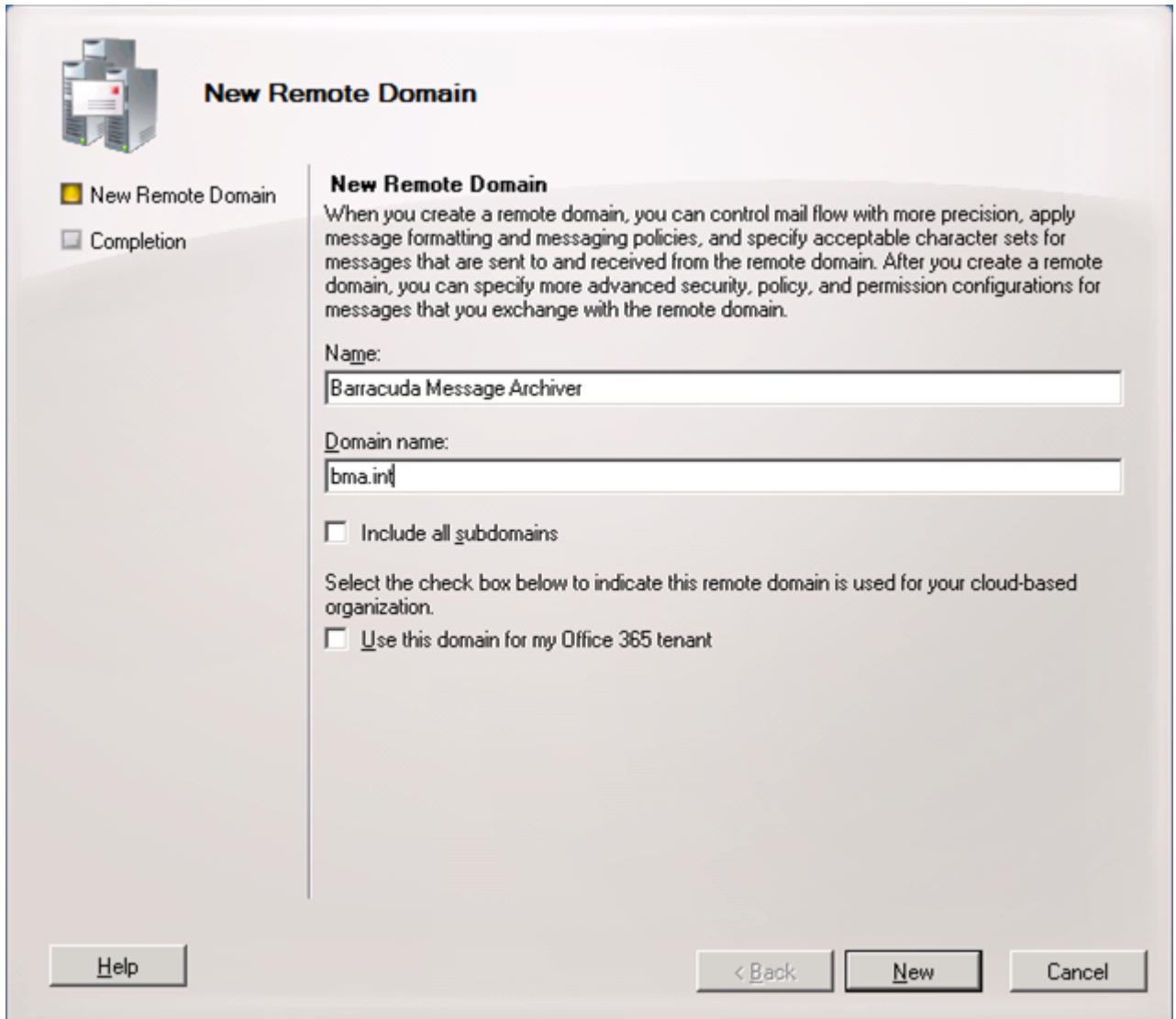
On the Barracuda Message Archiver, use the following steps to enable SMTP forwarding:

1. Go to the **MAIL SOURCES > SMTP** page.
2. In the **Trusted SMTP Servers** section, enter the IP address of each Exchange Server that is to journal directly to the Barracuda Message Archiver.

Step 3. Create a Remote Domain

The Remote Domain must be a non-existent or externally non-routable and unresolvable domain, from either inside or outside your organization, and must match the Mail Contact that is the recipient of journaled messages as it is used by the Exchange Server for routing all SMTP Journal traffic. Use the following steps to create a remote domain:

1. Open the **EMC**, expand **Organization Configuration**, select **Hub Transport**, and click the **Remote Domains** tab in the center pane.
2. In the **Actions** panel in the right pane, click **New Remote Domain**. The **New Remote Domain** dialog displays.
3. Enter a **Name** to describe the domain, and the actual **Domain name** you want to use. In this example, *bma.int* is the "fake" domain name that is used. You will use this domain name later when creating the Mail Contact:



The image shows a Windows-style dialog box titled "New Remote Domain". On the left, there is a tree view with two items: "New Remote Domain" (selected and highlighted in yellow) and "Completion". The main area of the dialog contains the following text and controls:

New Remote Domain

When you create a remote domain, you can control mail flow with more precision, apply message formatting and messaging policies, and specify acceptable character sets for messages that are sent to and received from the remote domain. After you create a remote domain, you can specify more advanced security, policy, and permission configurations for messages that you exchange with the remote domain.

Name:

Domain name:

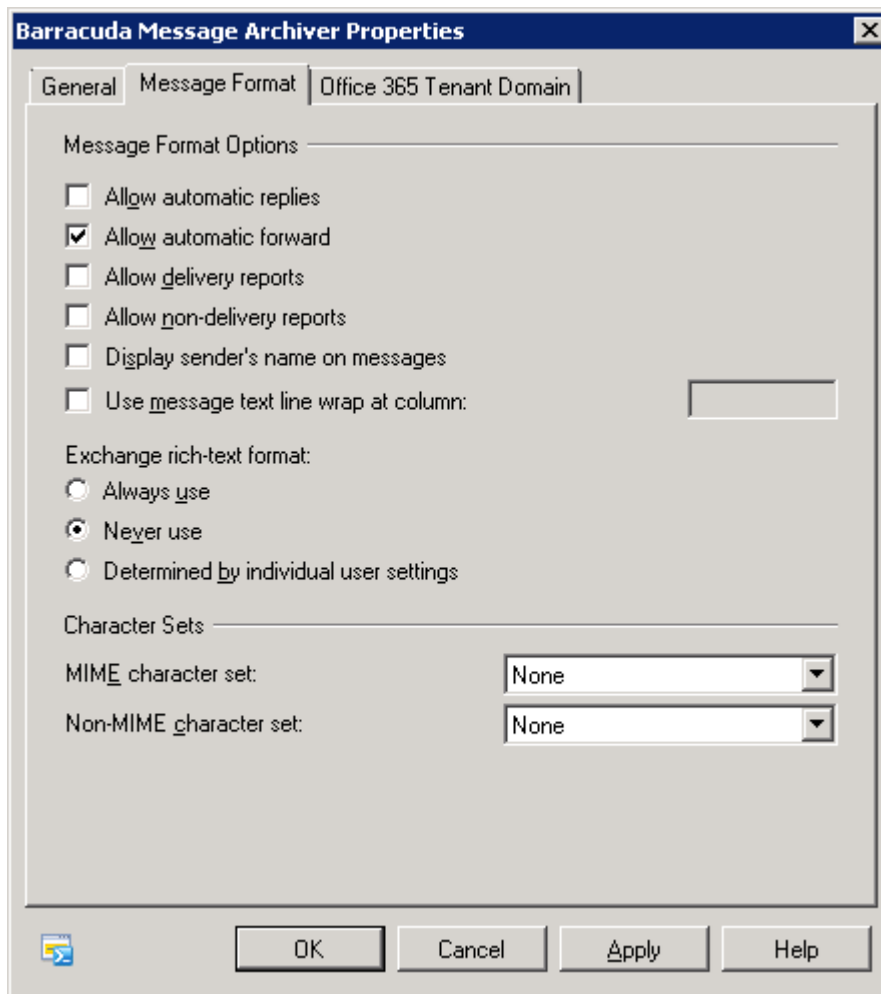
☐ Include all subdomains

Select the check box below to indicate this remote domain is used for your cloud-based organization.

☐ Use this domain for my Office 365 tenant

At the bottom, there are four buttons: "Help", "< Back", "New", and "Cancel".

4. Click **New** to verify the domain settings, and click **Finish** to save your settings. The newly created domain displays in the **Remote Domains** list.
5. Double-click on the newly created domain to open the **Properties** dialog for the newly created domain, and:
 - In Exchange 2007, select **Format of original message sent as attachment to the journal report**.
 - In Exchange 2010, select the **Message Format** tab in the **Properties** dialog box.
6. Select the following options to ensure journal messages sent to this domain are *MIME Plain Text* format (rather than the unsupported *Exchange Rich Text* format):
 - In the **Message Format Options** section, turn on **Allow automatic forward**.
 - In the **Exchange rich-text format** section, select **Never Use**:



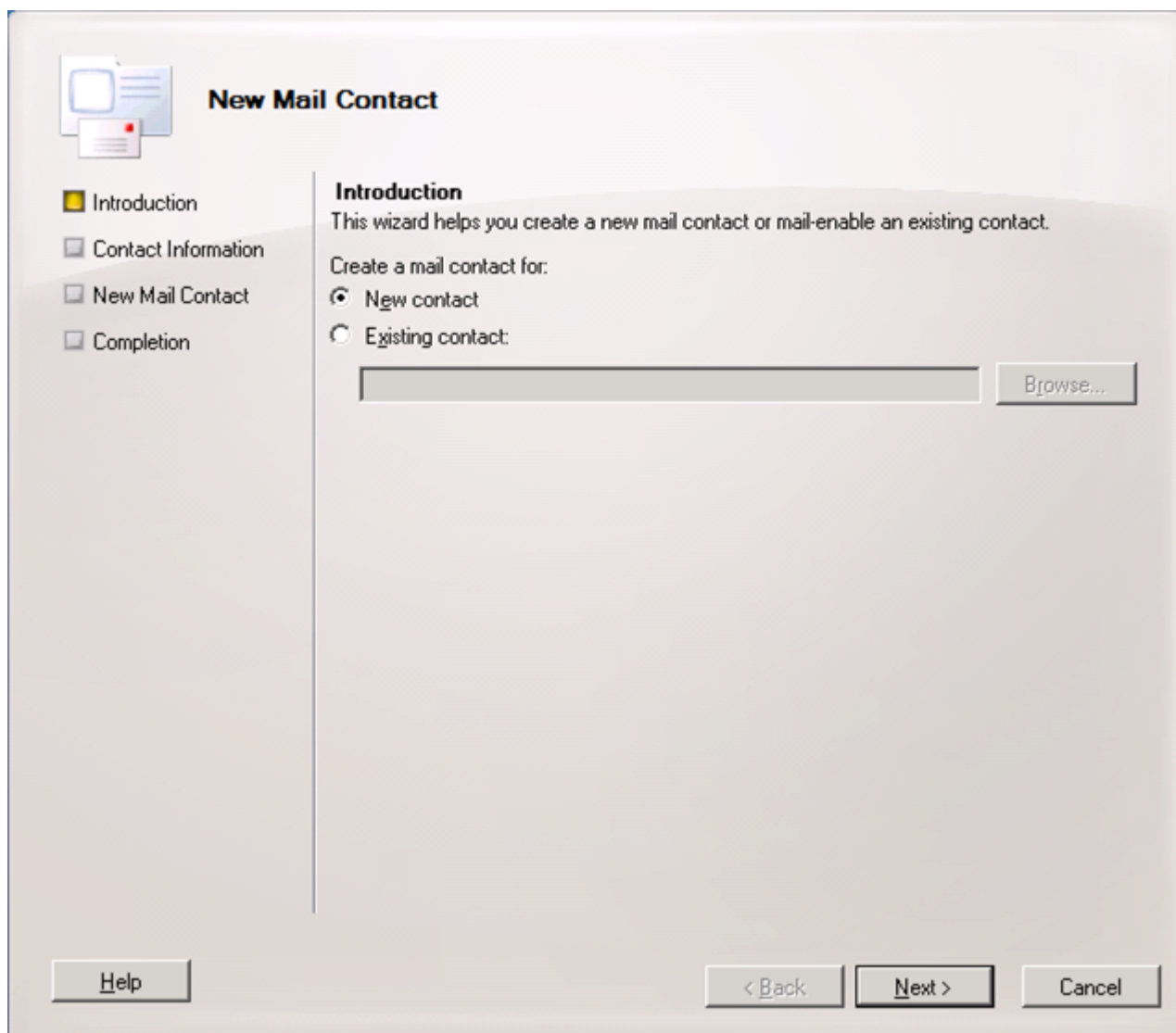
Verify that only **Never use** and **Allow automatic forward** are selected in the dialog box.

7. Click **Apply** to save your settings, and click **OK** to close the **Properties** dialog.

Step 4. Create a Mail Contact

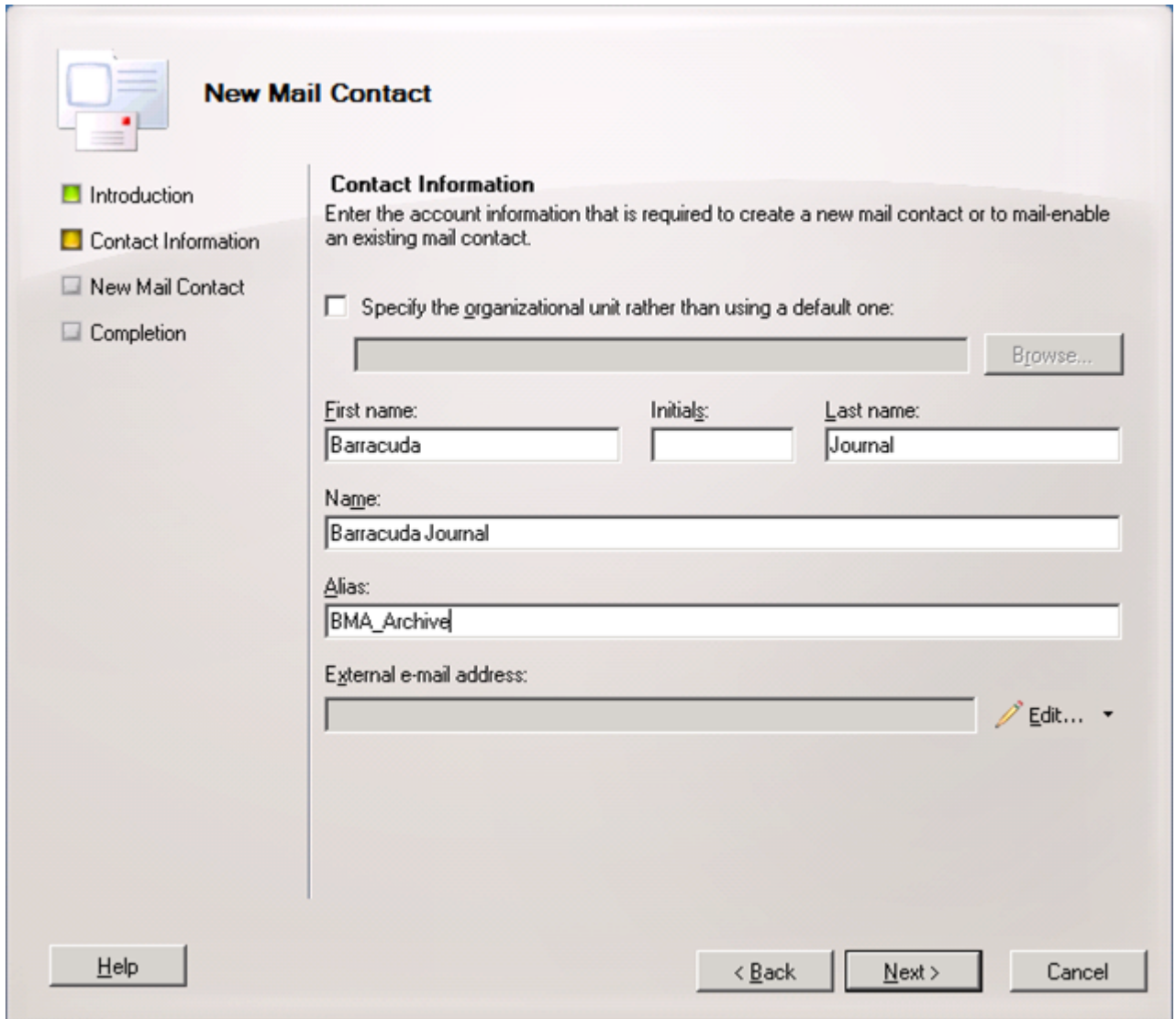
The Mail Contact is the account that is to act as a "holding location" for journaled messages. The email address associated with this account is the designated recipient, and should be associated with a non-routable "dummy" domain name. Use the following steps to create a Mail Contact:

1. In the **EMC**, expand **Recipient Configuration**, select **Mail Contact**, and in the **Actions** panel, click **New Mail Contact**:



The image shows a 'New Mail Contact' wizard dialog box. On the left, there is a vertical list of steps: 'Introduction' (selected with a yellow square), 'Contact Information' (checkbox), 'New Mail Contact' (checkbox), and 'Completion' (checkbox). The main area is titled 'Introduction' and contains the text: 'This wizard helps you create a new mail contact or mail-enable an existing contact.' Below this, it says 'Create a mail contact for:' followed by two radio buttons: 'New contact' (selected) and 'Existing contact:'. Under 'Existing contact:', there is a text input field and a 'Browse...' button. At the bottom of the dialog, there are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button on the far right.

2. In the dialog, select **New Contact**, and click **Next**.
3. Enter a **First name** and **Last name**; the **Name** field automatically populates based on the entered values. Enter an **Alias**:



New Mail Contact

☒ Introduction
☒ Contact Information
☐ New Mail Contact
☐ Completion

Contact Information
Enter the account information that is required to create a new mail contact or to mail-enable an existing mail contact.

☐ Specify the organizational unit rather than using a default one:
 Browse...

First name: Initials: Last name:

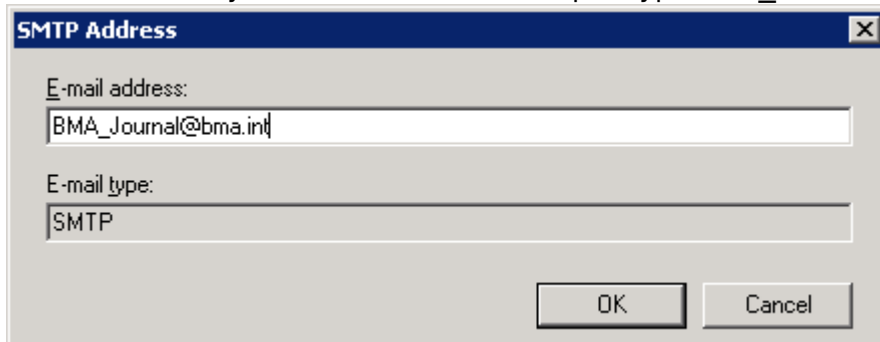
Name:

Alias:

External e-mail address: Edit...

Help < Back Next > Cancel

4. Click **Edit** to the right of the **External e-mail address** field, and in the **SMTP Address** dialog, enter the delivery email address, for example, type: `BMA_Journal@bma.int`



SMTP Address

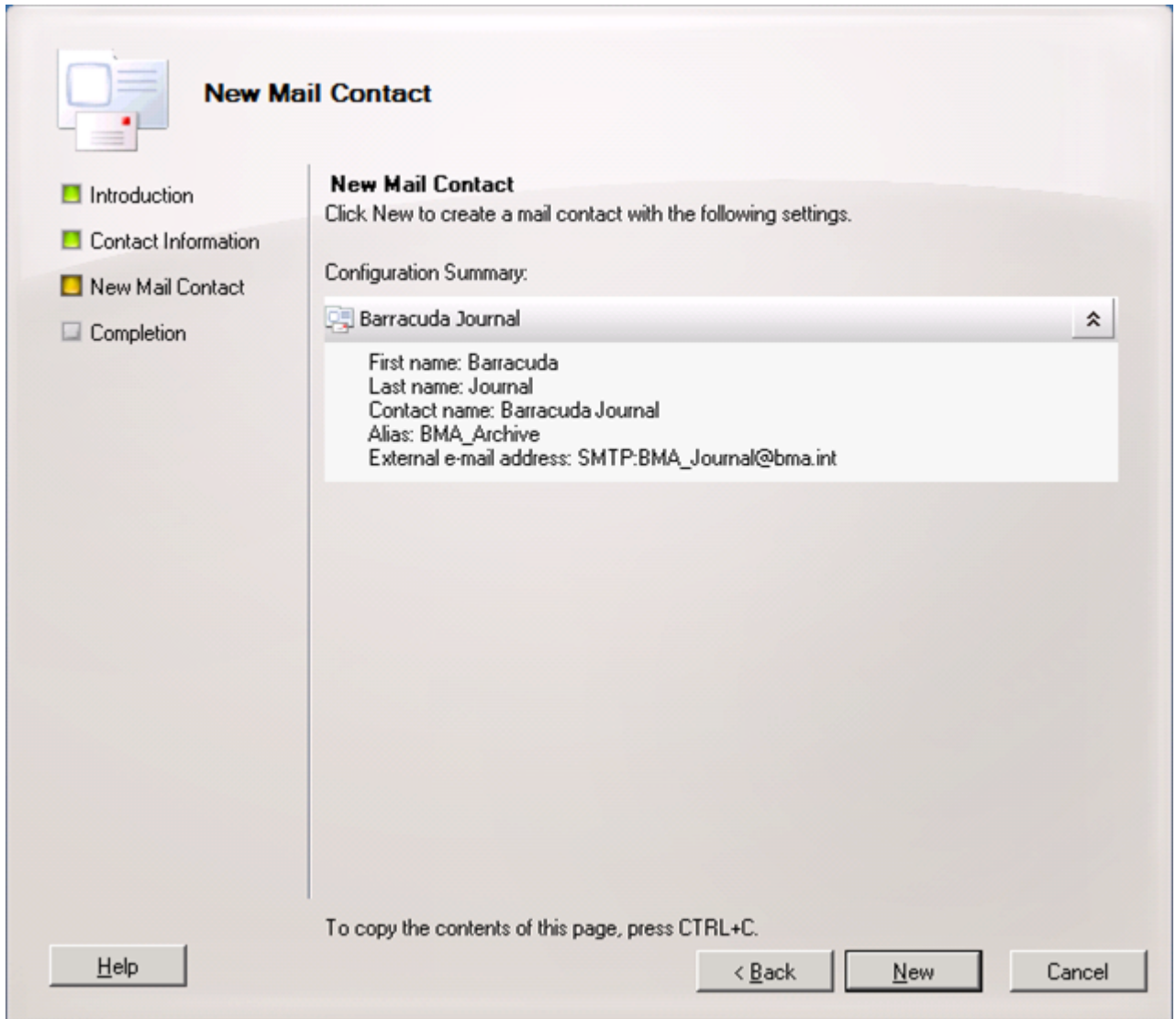
E-mail address:

E-mail type:

OK Cancel

The account name can be anything you want, but the domain name *must match* what you created in the preceding section, *Create a Remote Domain*.

5. Click **OK** to close the dialog box. In the Wizard, click **Next** to verify the information:



New Mail Contact

Click New to create a mail contact with the following settings.

Configuration Summary:

Barracuda Journal

First name: Barracuda
Last name: Journal
Contact name: Barracuda Journal
Alias: BMA_Archive
External e-mail address: SMTP:BMA_Journal@bma.int

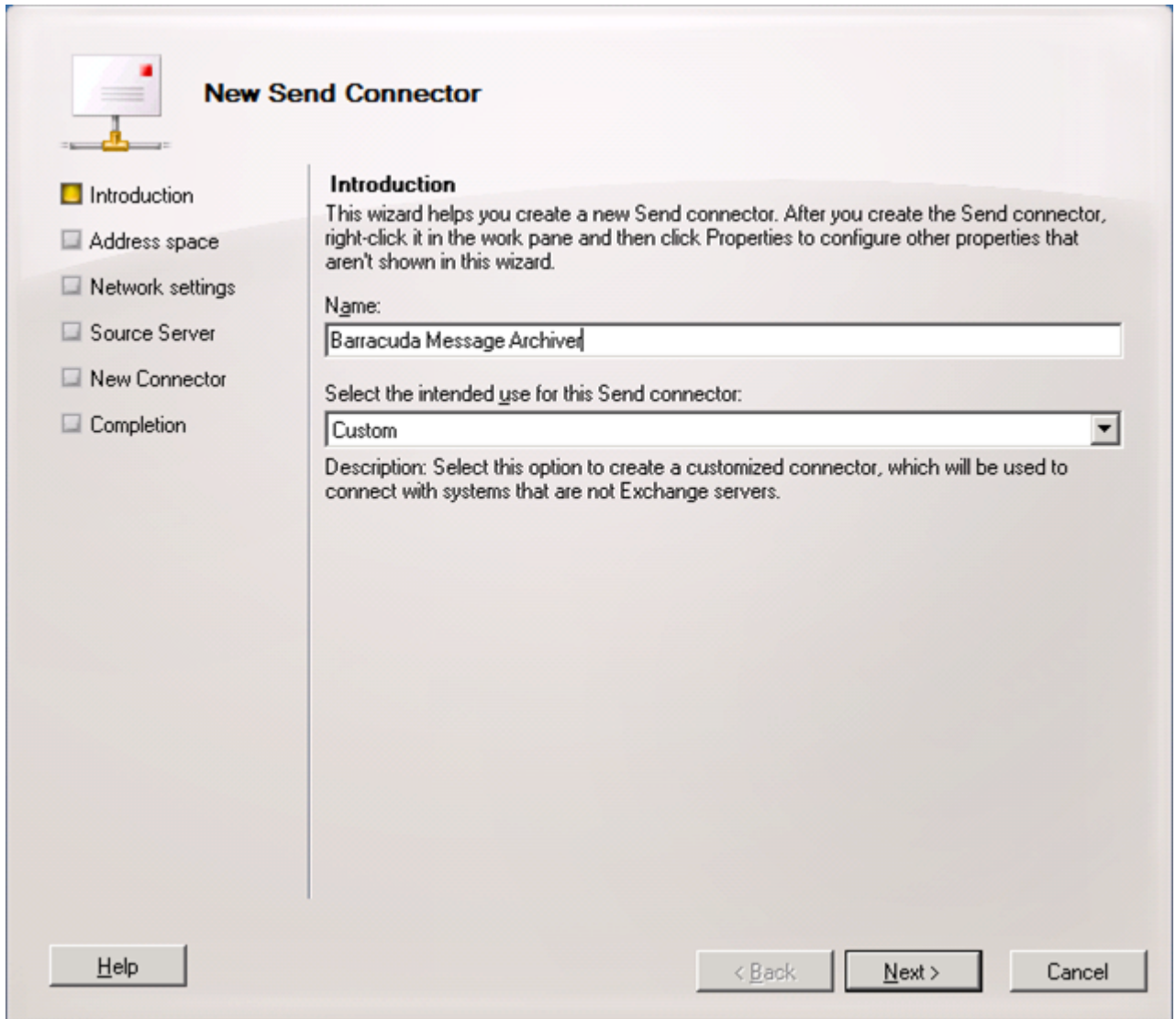
To copy the contents of this page, press CTRL+C.

Help < Back New Cancel

6. Click **New** to create the Mail Contact. The newly-created contact appears in the **Mail Contact** list. Click **Finish** to close the Wizard.

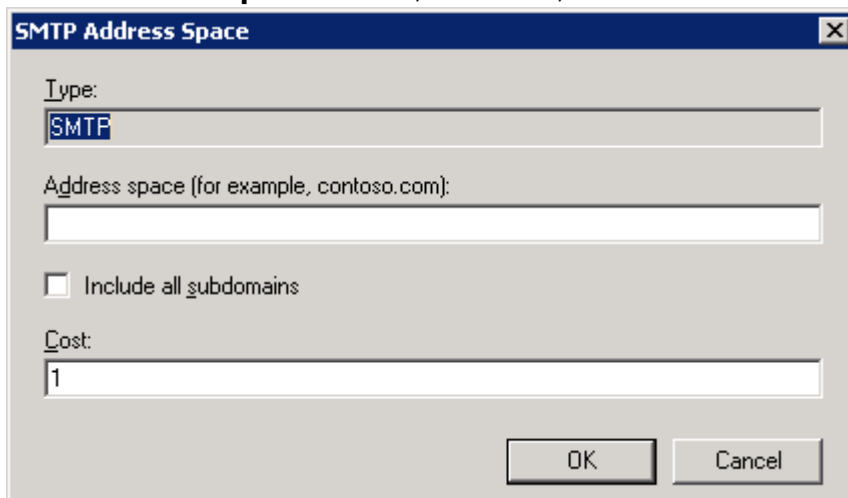
Step 5. Create a Send Connector

1. In the **EMC**, expand **Organization Configuration**, select **Hub Transport**, and select the **Send Connector** tab. In the **Actions** panel, and click **New Send Connector**. The **New Send Connector** dialog displays. Enter a **Name** to identify this send connector, for example, type: Barracuda Message Archiver



The screenshot shows the 'New Send Connector' wizard. On the left is a tree view with the following steps: Introduction (selected), Address space, Network settings, Source Server, New Connector, and Completion. The main pane shows the 'Introduction' step. It contains an 'Introduction' section with a paragraph explaining the wizard's purpose. Below this is a 'Name:' label followed by a text box containing 'Barracuda Message Archiver'. Then, there is a 'Select the intended use for this Send connector:' label followed by a dropdown menu currently set to 'Custom'. Below the dropdown is a 'Description:' label followed by a paragraph explaining the 'Custom' option. At the bottom of the wizard are three buttons: 'Help', '< Back', and 'Next >', and a 'Cancel' button on the far right.

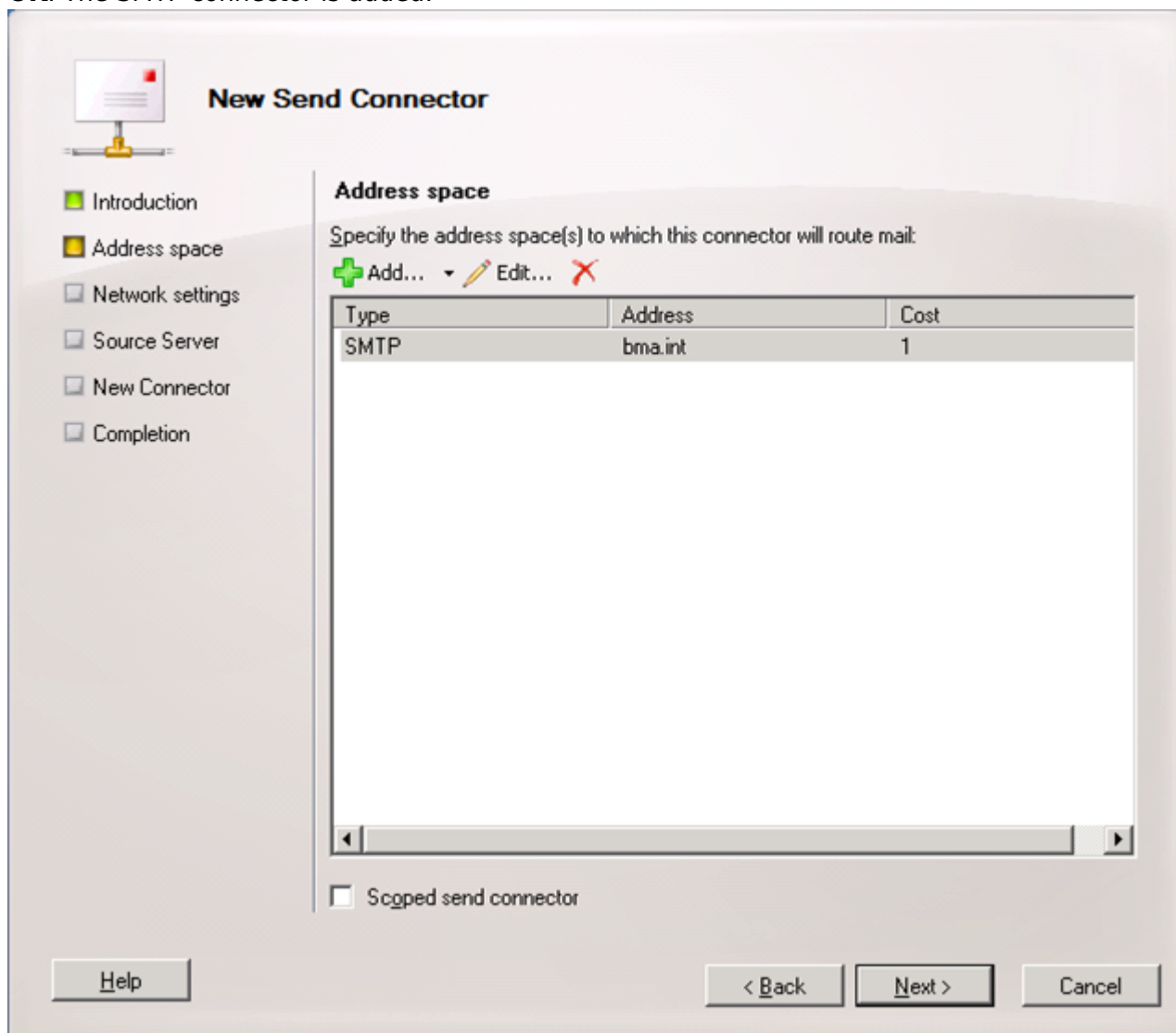
2. From the **Select the intended use for this Send connector** menu, select **Custom**, and click **Next**.
3. In the **Address Space** section, click **Add**; the **SMTP Address Space** dialog box displays:



The screenshot shows the 'SMTP Address Space' dialog box. It has a title bar with 'SMTP Address Space' and a close button. Inside, there are four fields: 'Type:' with a dropdown menu showing 'SMTP'; 'Address space (for example, contoso.com):' with an empty text box; 'Include all subdomains' with an unchecked checkbox; and 'Cost:' with a text box containing the number '1'. At the bottom are 'OK' and 'Cancel' buttons.

4. In the **Address space** field, enter the domain created earlier, for example, `bma.int`, and click

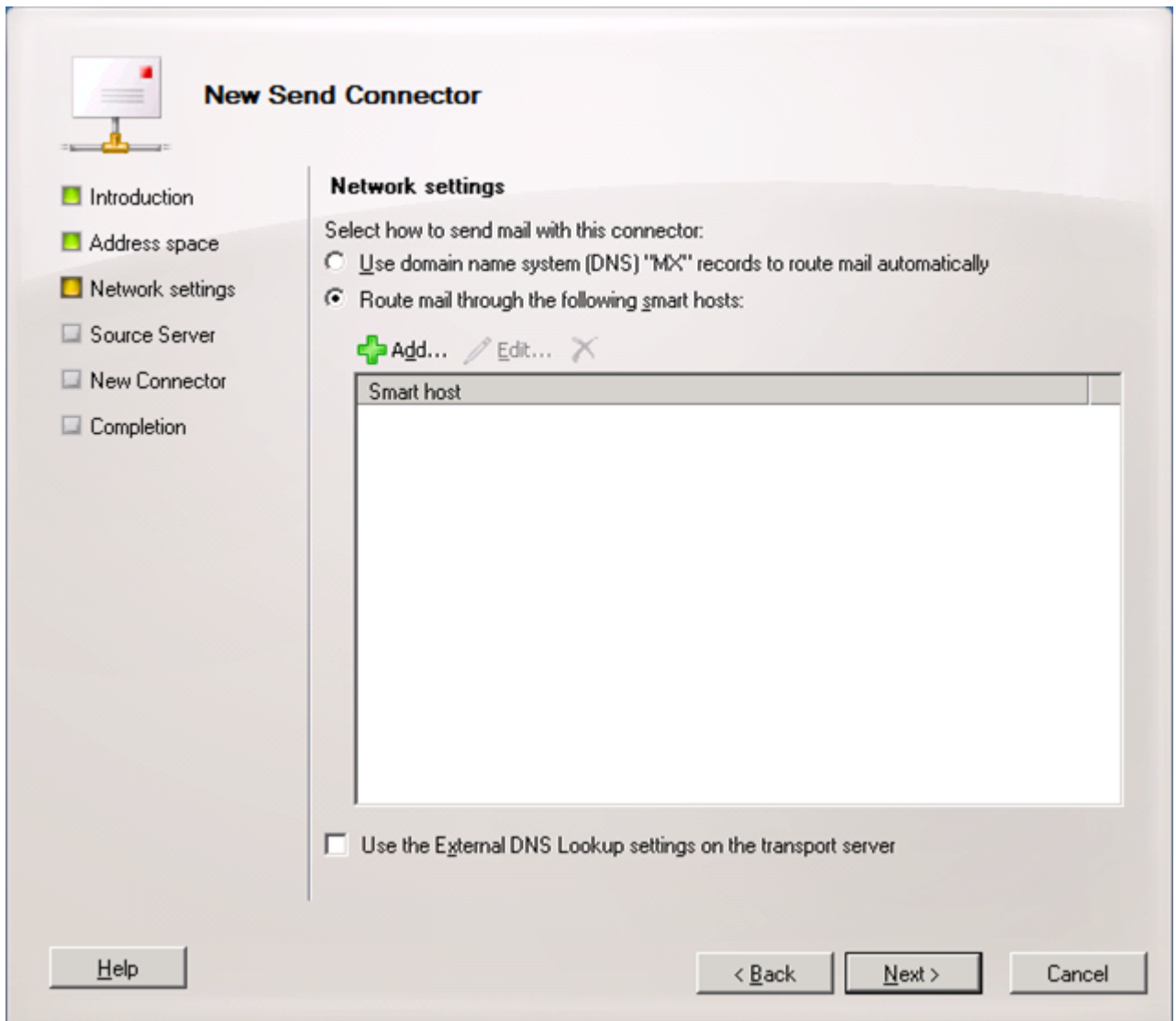
OK. The SMTP connector is added:



The screenshot shows the 'New Send Connector' wizard in the Microsoft Exchange Management Console. The 'Address space' step is selected in the left-hand navigation pane. The main area is titled 'Address space' and contains the instruction 'Specify the address space(s) to which this connector will route mail:'. Below this instruction are three buttons: a green plus icon followed by 'Add...', a pencil icon followed by 'Edit...', and a red X icon. A table is displayed below these buttons, containing one row of data. The table has three columns: 'Type', 'Address', and 'Cost'. The row shows 'SMTP' in the 'Type' column, 'bma.int' in the 'Address' column, and '1' in the 'Cost' column. At the bottom of the wizard, there is a checkbox labeled 'Scoped send connector' which is currently unchecked. The bottom of the window features four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

Type	Address	Cost
SMTP	bma.int	1

5. Click **Next**. Select **Route mail through the following smart host**:



The "New Send Connector" dialog box is shown. On the left is a tree view with the following items: Introduction (selected), Address space, Network settings, Source Server, New Connector, and Completion. The main area is titled "Network settings" and contains the text "Select how to send mail with this connector:". Below this are two radio buttons: "Use domain name system (DNS) 'MX' records to route mail automatically" (unselected) and "Route mail through the following smart hosts:" (selected). Below the radio buttons are three icons: a green plus sign labeled "Add...", a pencil labeled "Edit...", and a red X labeled "Delete...". Below these icons is a large empty text box labeled "Smart host". At the bottom of the main area is a checkbox labeled "Use the External DNS Lookup settings on the transport server" which is unchecked. At the bottom of the dialog are four buttons: "Help", "< Back", "Next >", and "Cancel".

6. Click **Add**. In the **Add smart host** dialog box, select **IP address**, and type the service IP address configured in Step 2. *Configure the Barracuda Load Balancer ADC*, for example, type: 192.168.1.100

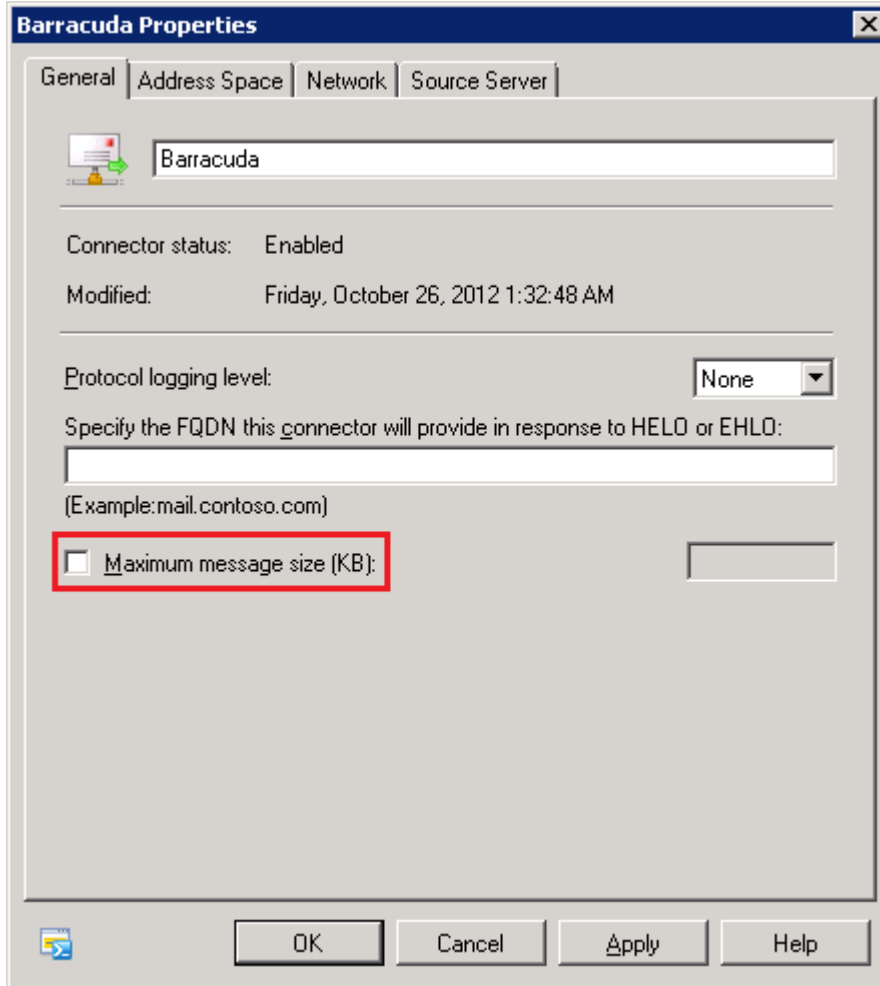


The "Add smart host" dialog box is shown. It has a title bar with "Add smart host" and a close button. Inside, there are two radio buttons: "IP address:" (selected) and "Fully qualified domain name (FQDN):". Below the "IP address:" radio button is a text box containing "192.168.1.100". Below this text box is the text "Example: 192.168.10.10". Below the "Fully qualified domain name (FQDN):" radio button is an empty text box. Below this text box is the text "Example: ipgateway1.contoso.com". At the bottom are two buttons: "OK" and "Cancel".

7. Click **OK** to add the IP address. Click **Next**, then click **Next** again.
8. In the **Source Server** page, if your Exchange server is not already listed, click **Add** to search

for and add the server to this list. Click **Next** to verify your configuration, and click **New** to create the Send Connector. Click **Finish** to return to the **Send Connectors** tab; the newly-created Send Connector displays in the list.

9. Right-click on the new Send Connector, and click **Properties**.
10. In the **Properties** dialog box, clear **Maximum message size (KB)**:

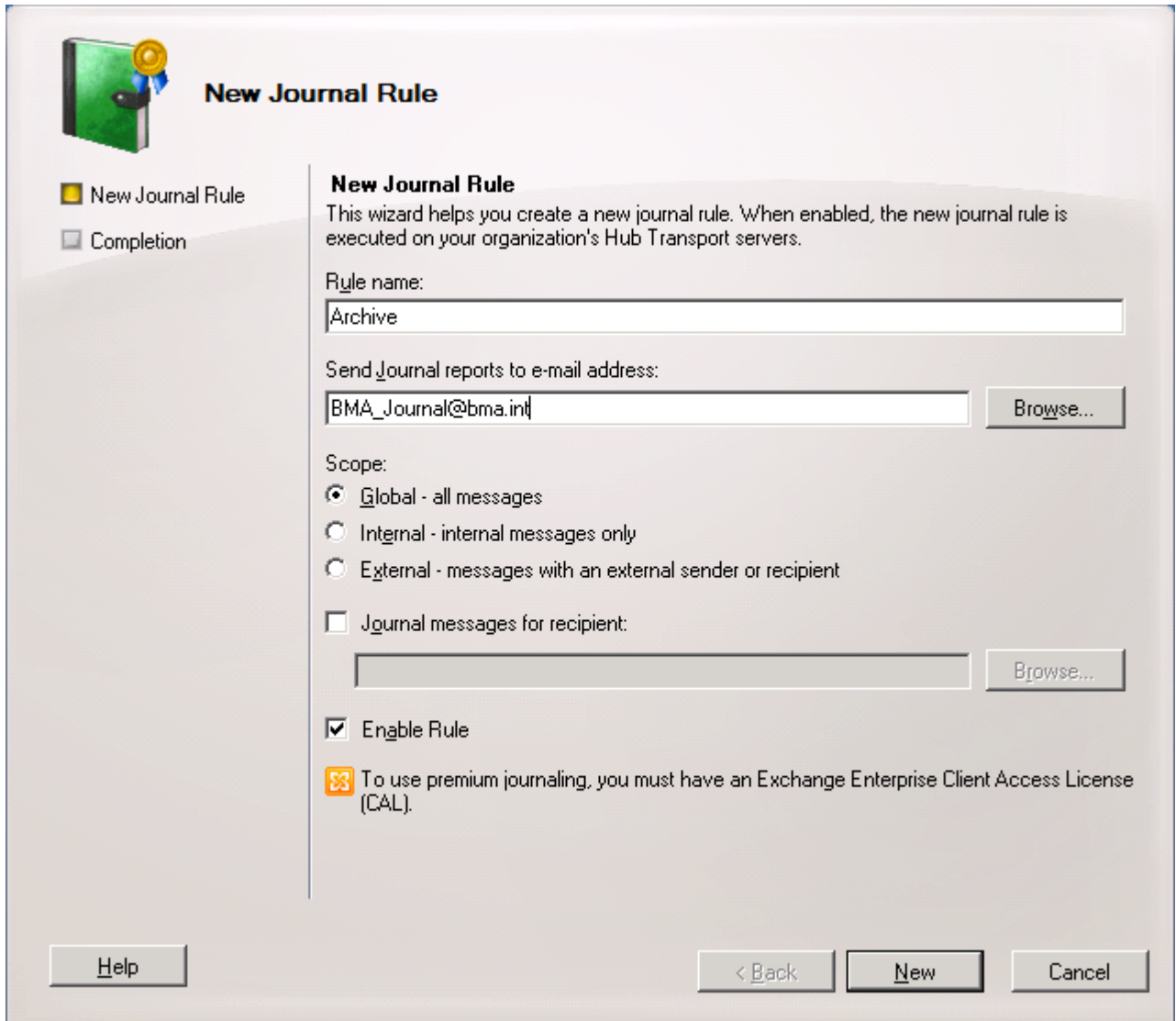


11. Click **Apply**, and then click **OK** to save your changes and close the dialog box.

Step 6. Create a Journaling Rule

Both the Standard and Enterprise versions of Microsoft Exchange Server 2007 and 2010 support Standard and Premium Journaling. Open the EMC, and complete the following steps to add a journaling rule:

1. In the **EMC**, expand **Organization Configuration**, select **Hub Transport**, and select the **Journal Rules** tab.
2. In the **Actions** panel, click **New Journal Rule**; the **New Journal Rule** dialog displays.
3. Enter a Rule name, and for the **Send Journal reports to e-mail address**, click **Browse** and navigate to and select the mail contact created in the section **Create a Mail Contact**; for example, `BMA_Journal@bma.int`



The screenshot shows the 'New Journal Rule' wizard in the Barracuda Message Archiver interface. The wizard has two steps: 'New Journal Rule' (active) and 'Completion'. The 'New Journal Rule' step contains the following fields and options:

- Rule name:** A text box containing 'Archive'.
- Send Journal reports to e-mail address:** A text box containing 'BMA_Journal@bma.int' and a 'Browse...' button.
- Scope:** Three radio button options: 'Global - all messages' (selected), 'Internal - internal messages only', and 'External - messages with an external sender or recipient'.
- Journal messages for recipient:** A checkbox (unchecked) with a text box and a 'Browse...' button.
- Enable Rule:** A checkbox (checked).
- License Note:** A warning icon and text: 'To use premium journaling, you must have an Exchange Enterprise Client Access License (CAL)'.

At the bottom of the wizard are four buttons: 'Help', '< Back', 'New', and 'Cancel'.

4. Select the Scope for archiving; the recommended setting is **Global - all messages** for the most complete coverage.
5. Turn on **Enable Rule**, click **New** to create the Journaling rule, and click **Finish** to return to the **Journal Rules** tab where the newly-created rule displays in the list.

Your Barracuda Message Archivers are now set up in an Active-Passive configuration for receiving mail from Exchange. If your primary device goes offline, the Barracuda Load Balancer ADC automatically routes the SMTP traffic to the other Barracuda Message Archiver. Once you replace the failed unit, the backup unit sends over any new mail it received to ensure the devices remain in sync.

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