

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

<https://campus.barracuda.com/doc/18449564/>

This article refers to [Barracuda Message Archiver Legacy Release](#) firmware or higher, and a Microsoft Exchange Server 2013, 2016, or 2019 environment utilizing Standard Journaling, also known as mailbox database journaling.

If your Exchange environment has Premium Journaling capability, and you want more granular control over journaling, use the set up details in the article [How to Configure Envelope \(SMTP\) Journaling for Microsoft Exchange Server 2013 and Newer - Premium Journaling](#).

Microsoft Exchange allows a Journal recipient to be either a *mailbox* or a *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 and newer, the ECP/EAC has no analogous functionality so you must use PowerShell to create the Remote Domain.

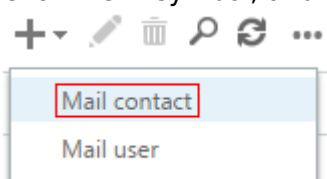
To create a Remote Domain, you must enter a **Name** to describe the domain, and the actual **Domain Name** to use. In this example, `bma.int` is the dummy Domain Name that is used. You can use `bma.int` or create your own dummy Domain Name. Note that this Domain Name is also used to create the **Mail 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`

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

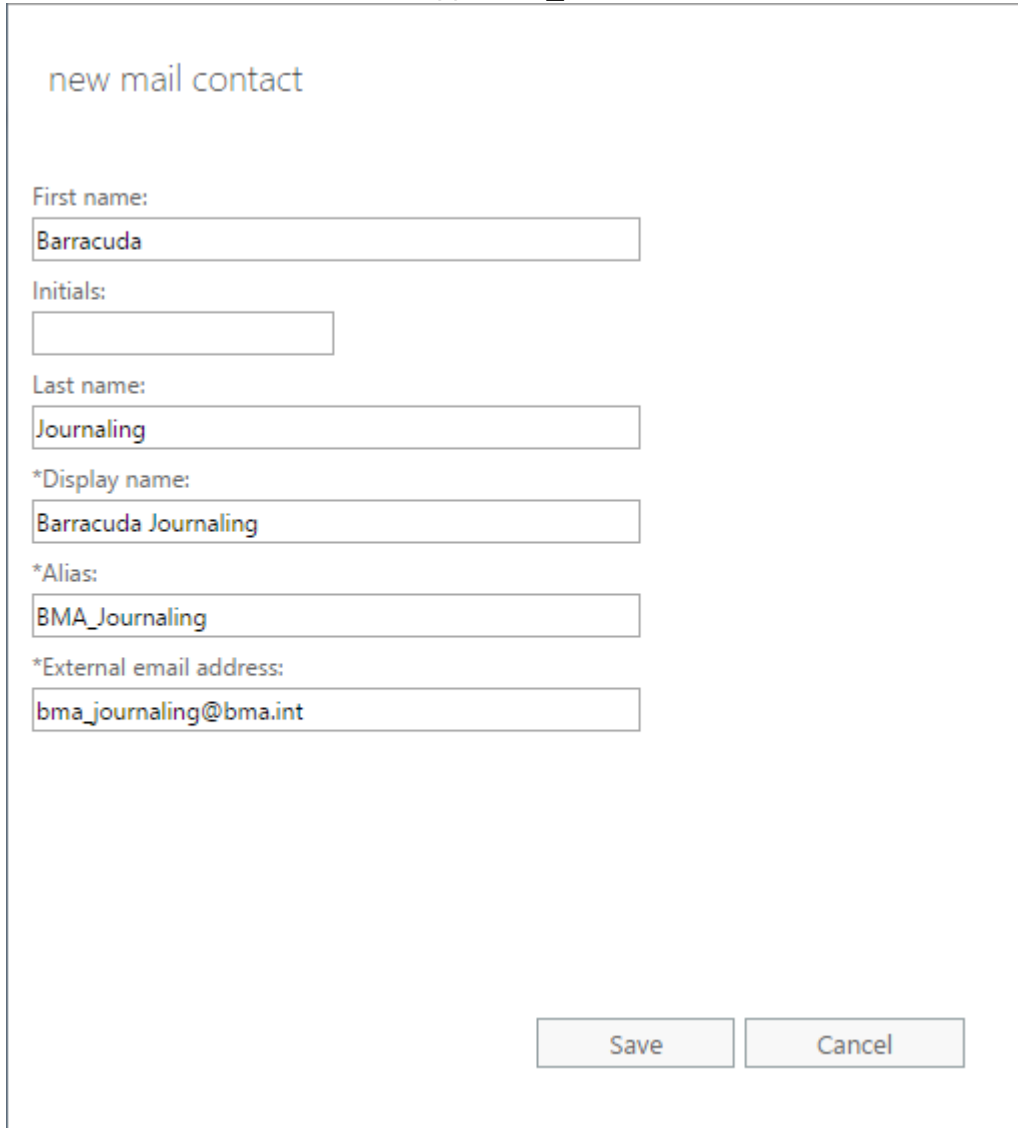
The Mail Contact is the account that is to act as a "holding location" for journaled messages. The email address associated with this account is the designated recipient and must be associated with a non-existent, non-routable dummy Domain Name created above in *Step 2. Create a Remote Domain From the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

1. Log into the Exchange Admin Center (EAC), 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 automatically populates
5. **Alias** - Type BMA_Journaling
6. External email address - Type bma_journaling@bma.int



4. Click **save**.

Barracuda Networks recommends hiding the mail contact from the Global Address List. You can use the following command in Exchange Management Shell to hide the mail contact:

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

Enter the following command to verify the setting:

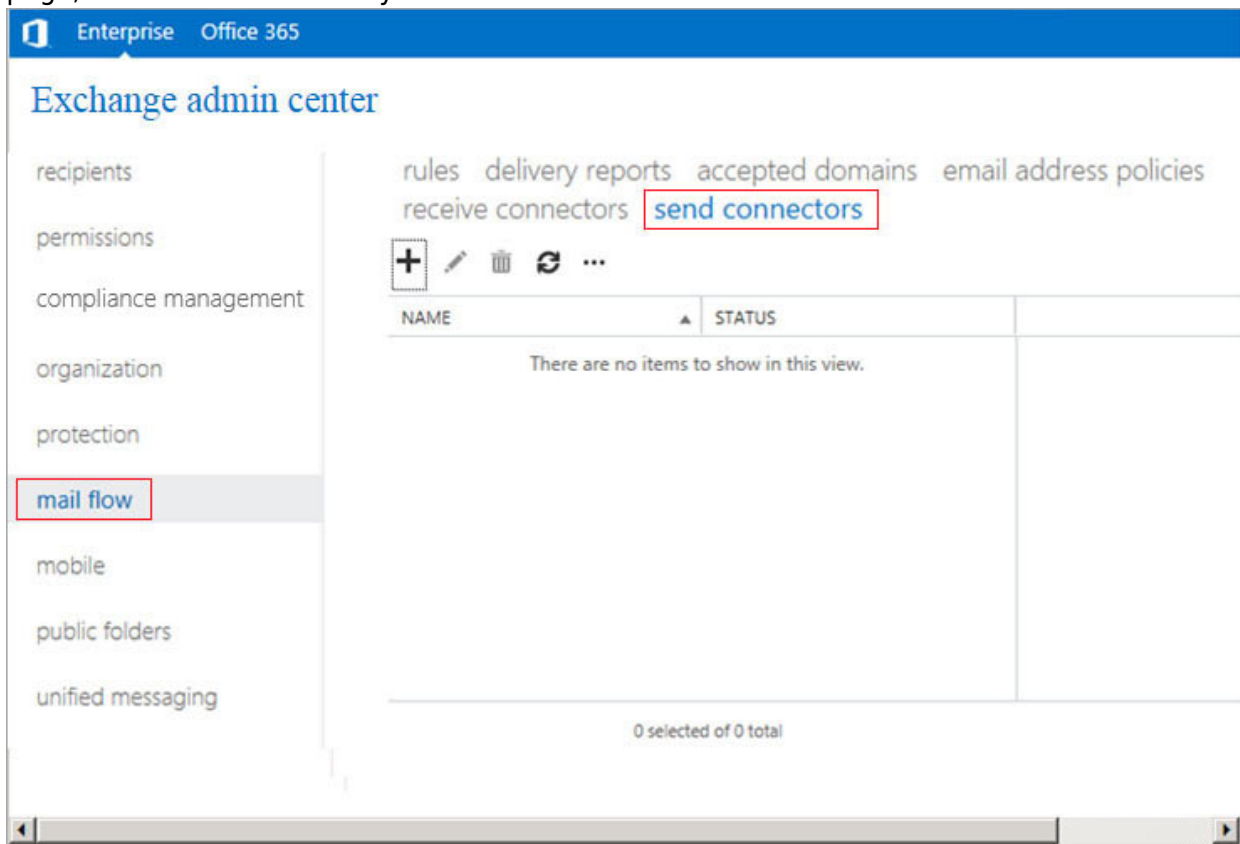
```
Get-MailContact | Where {$_.Name -eq "Barracuda Journaling"} | Format-  
table Name, HiddenFromAddressListsEnabled
```

Step 4. Create a Send Connector for the Remote Domain

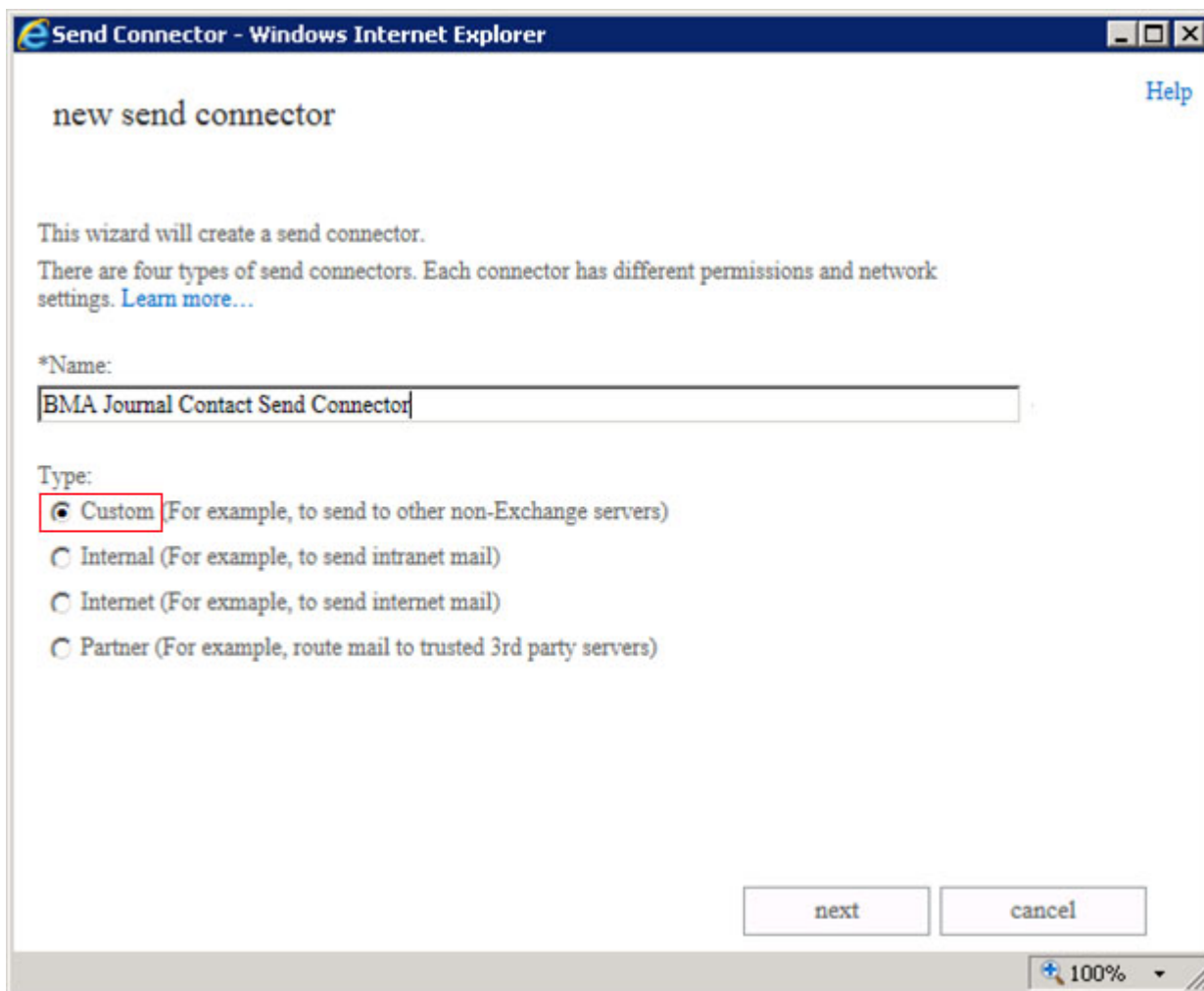
To ensure proper mail flow, verify that the Barracuda Message Archiver send connector has a lower cost value than the send connector for outbound SMTP traffic.

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:

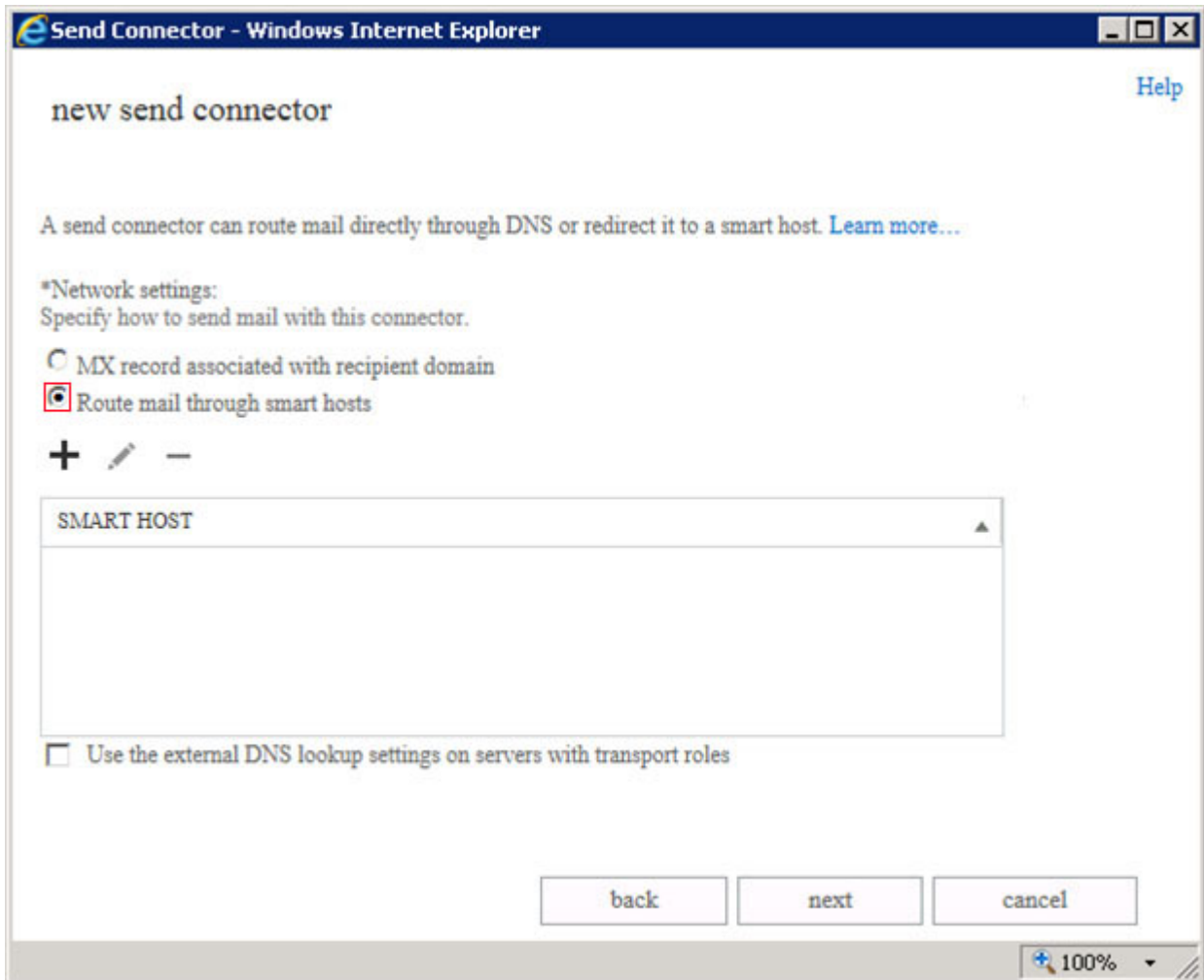
1. Log into the EAC, click **mail flow** in the left pane, select **send connectors** at the top of the page, and then click the **+** symbol to create a new send connector:



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



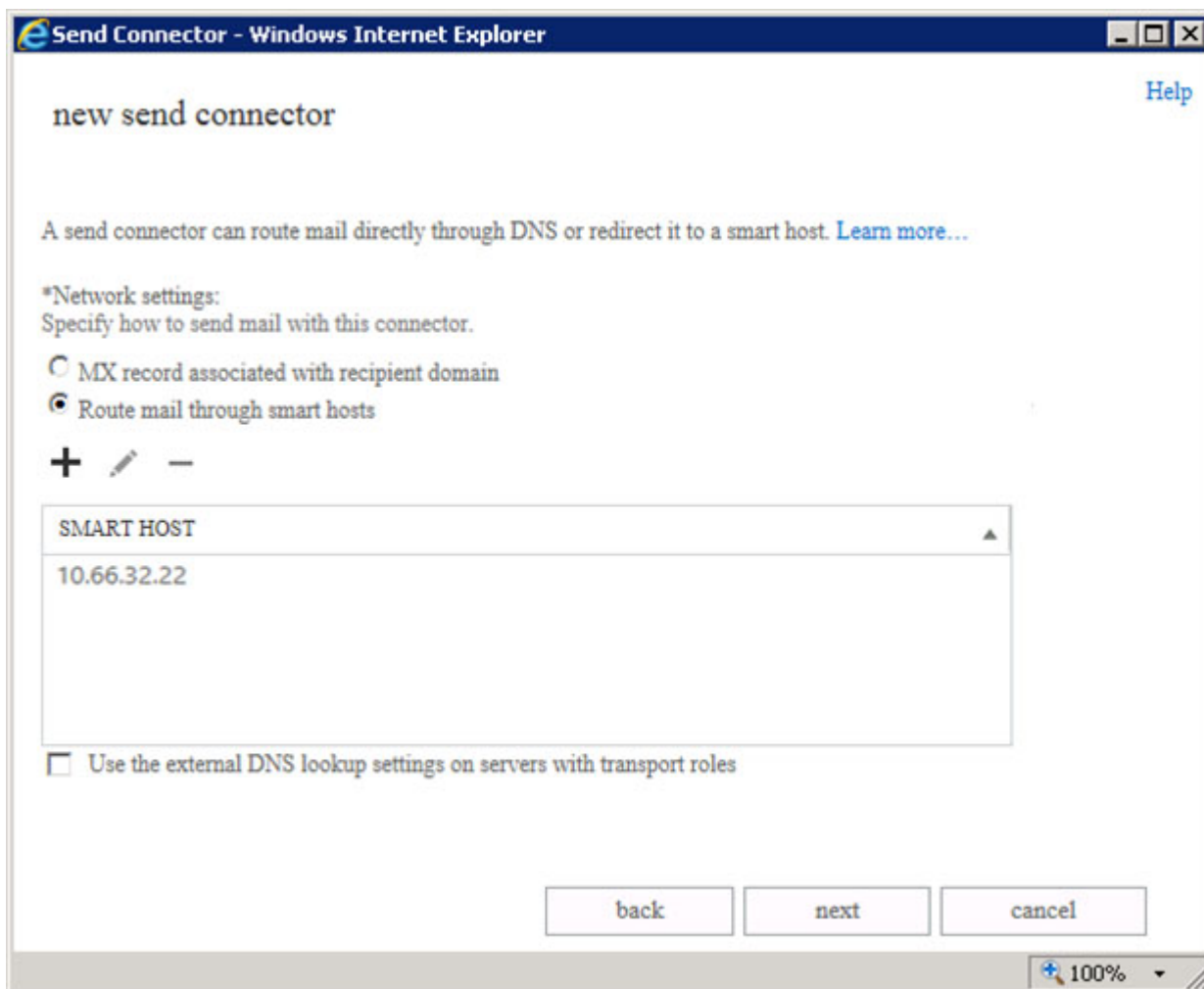
3. Click **next**. In the **Network settings** page, select **Route mail through smart hosts**:



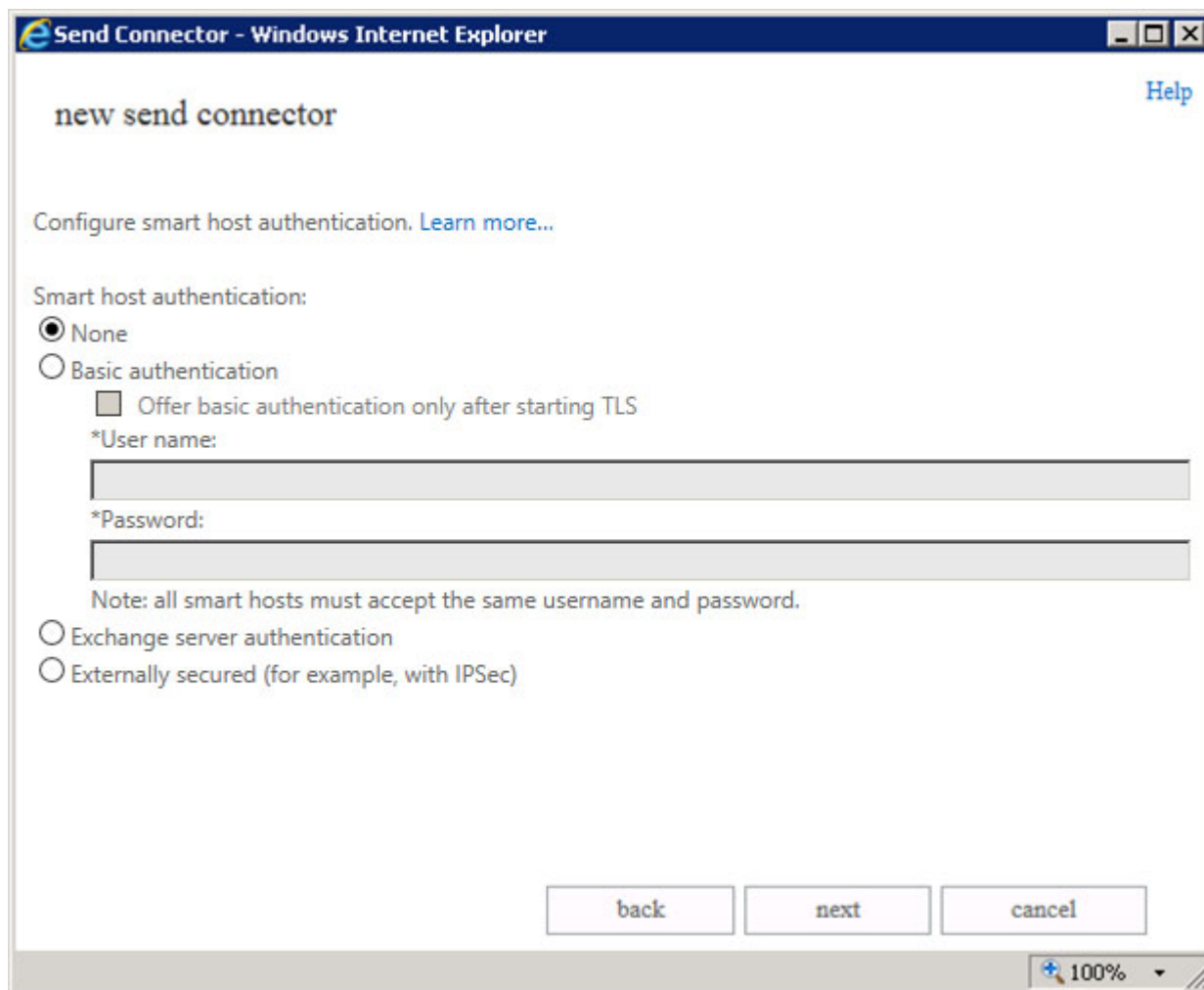
4. Click **next**. In the **add smart host** page, enter the Barracuda Message Archiver fully qualified domain name (FQDN) or IP address:



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



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.

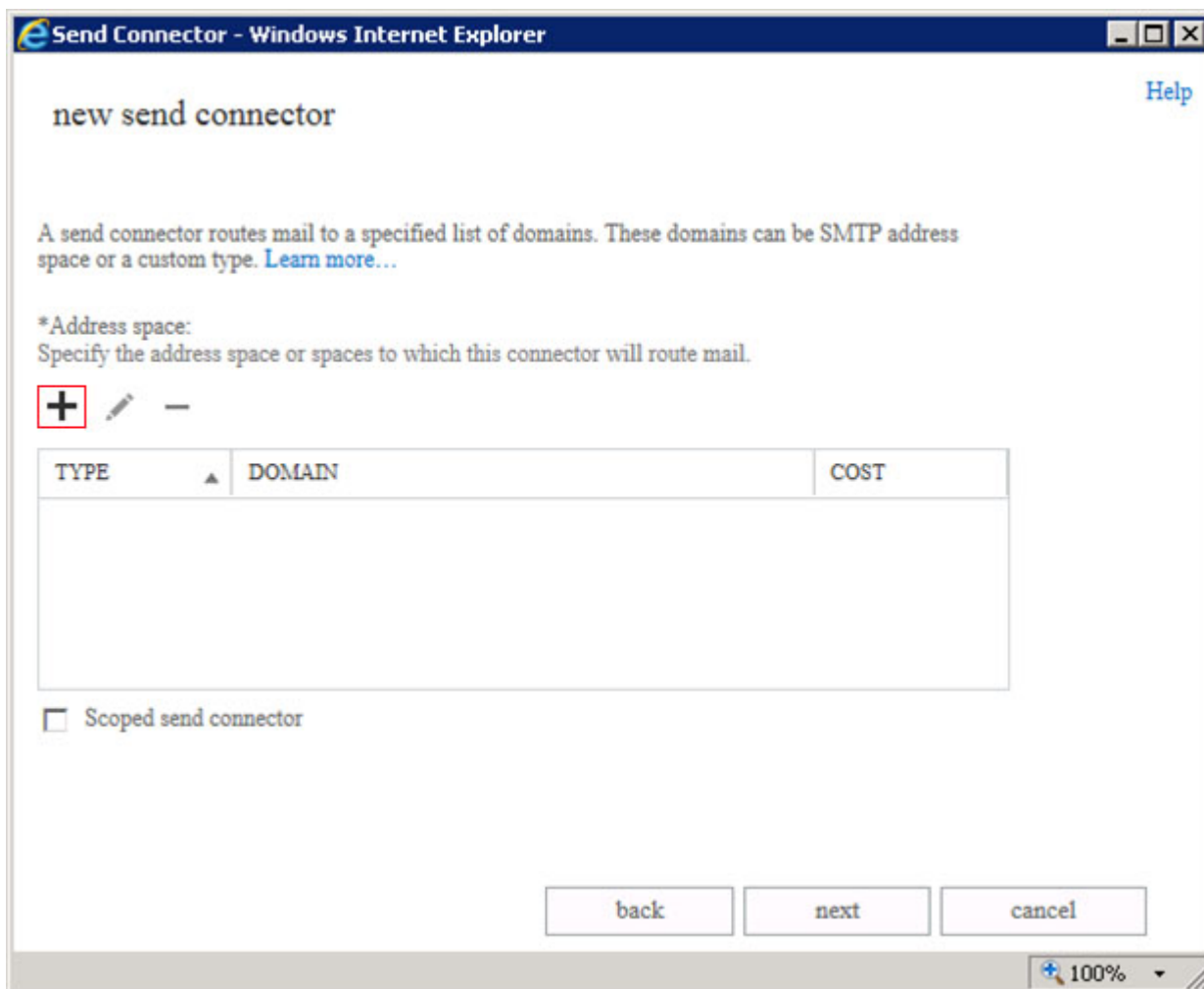
☐ Exchange server authentication

☐ Externally secured (for example, with IPSec)

back next cancel

100%



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



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.

+  

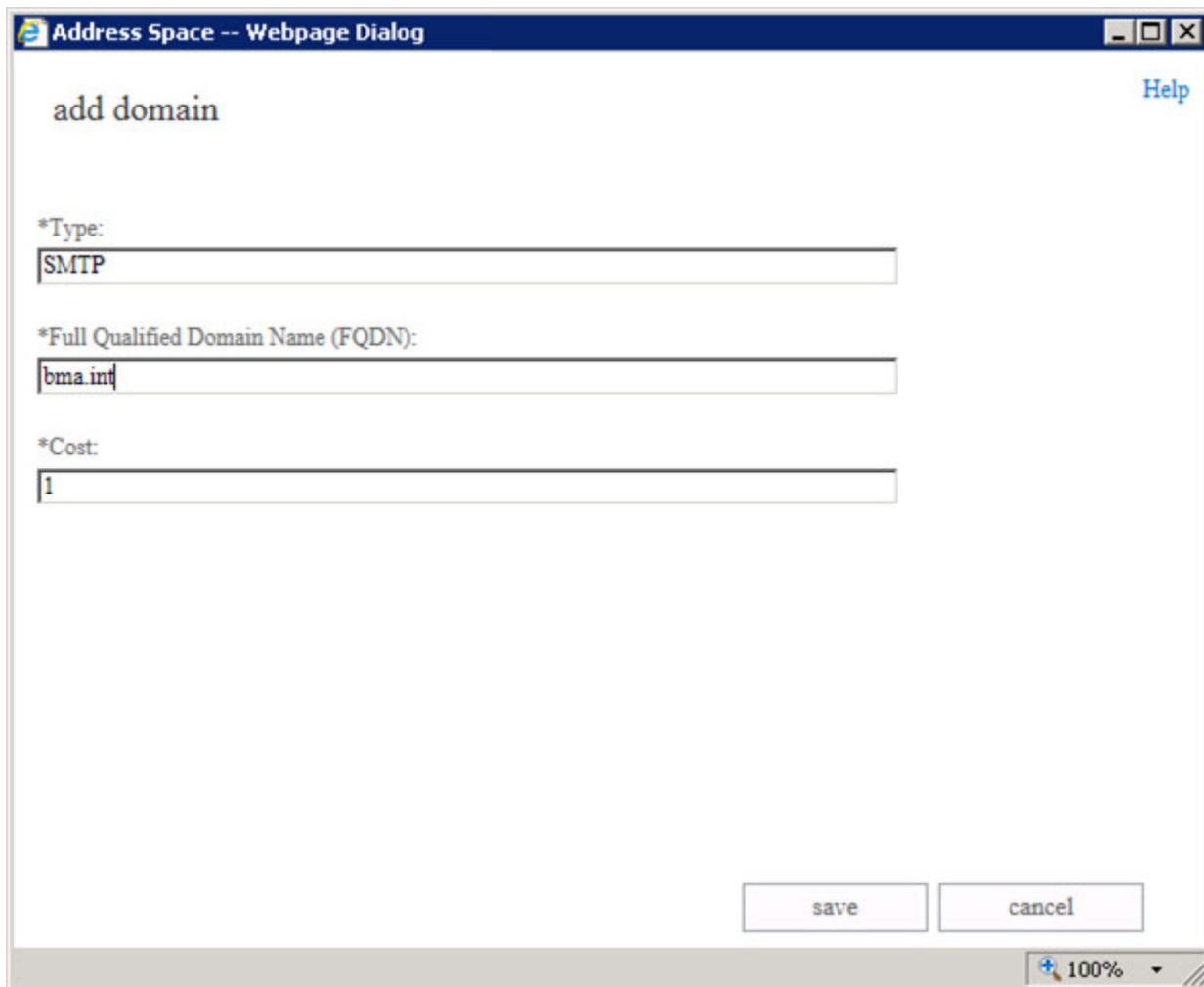
TYPE ▲	DOMAIN	COST
--------	--------	------

☐ 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*):



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, there are two buttons labeled "save" and "cancel". The bottom status bar shows a zoom icon, "100%", and a close button.

Address Space -- Webpage Dialog

add domain [Help](#)

*Type:
SMTP

*Full Qualified Domain Name (FQDN):
bma.int

*Cost:
1

save cancel

100%

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 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"/>

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. To the left of the table is a red square button with a white plus sign, and to its right is a minus sign. 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"/>

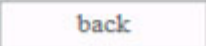


new send connector [Help](#)


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.

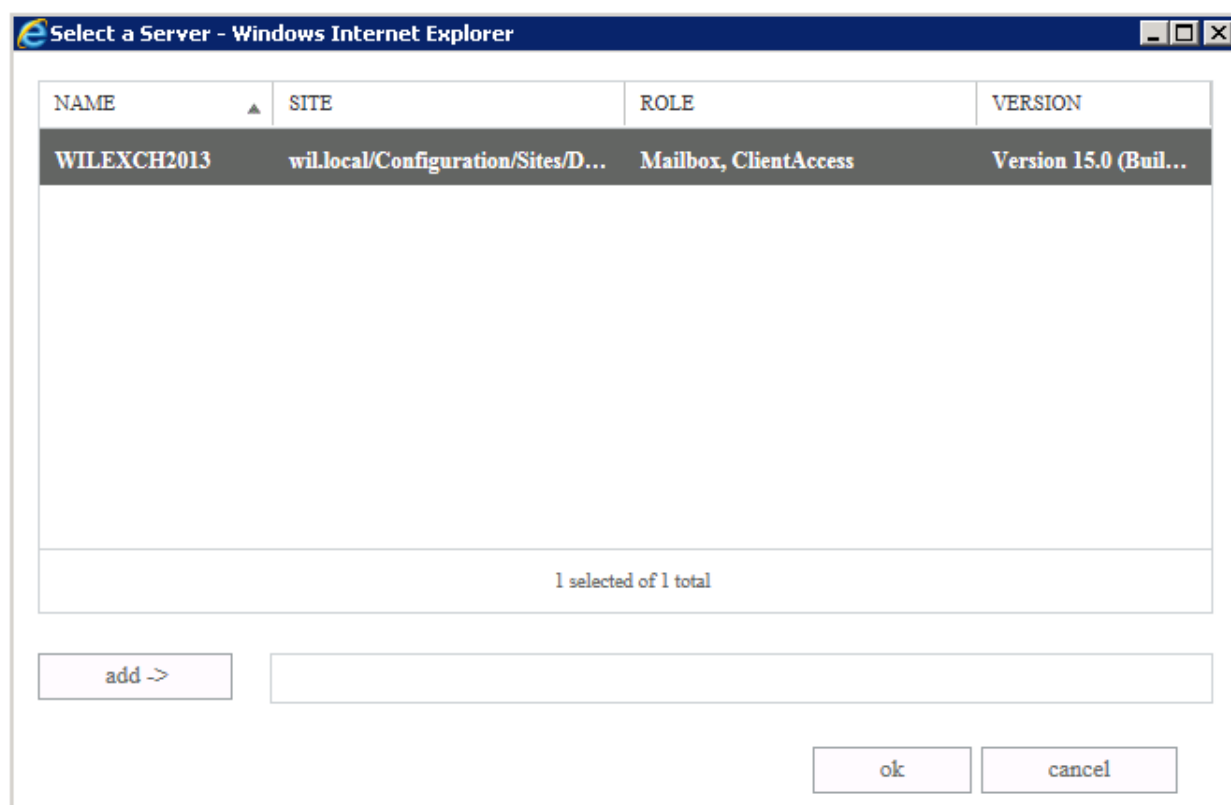
 

SERVER	SITE	ROLE
--------	------	------

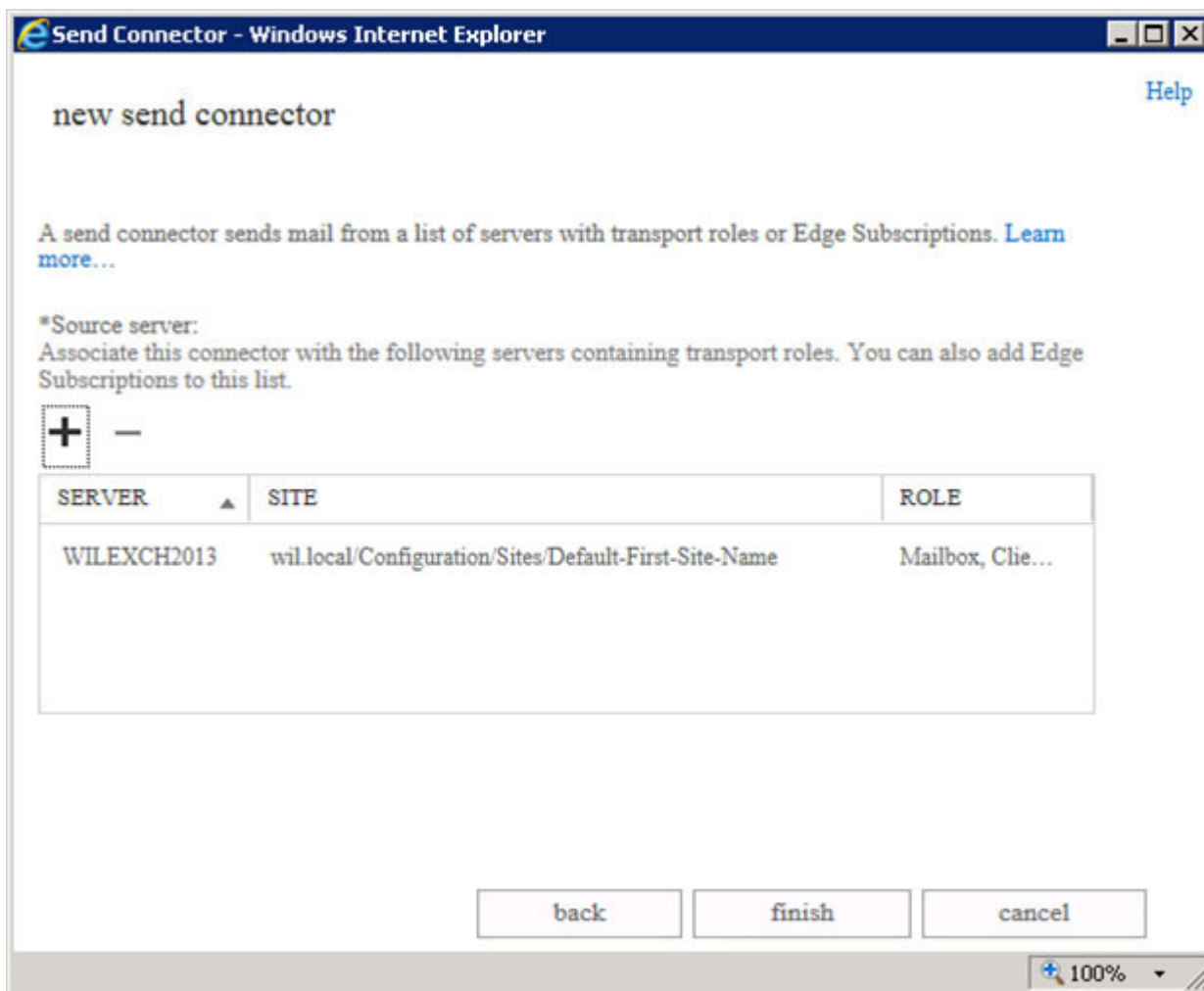
  

 100%

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...](#)

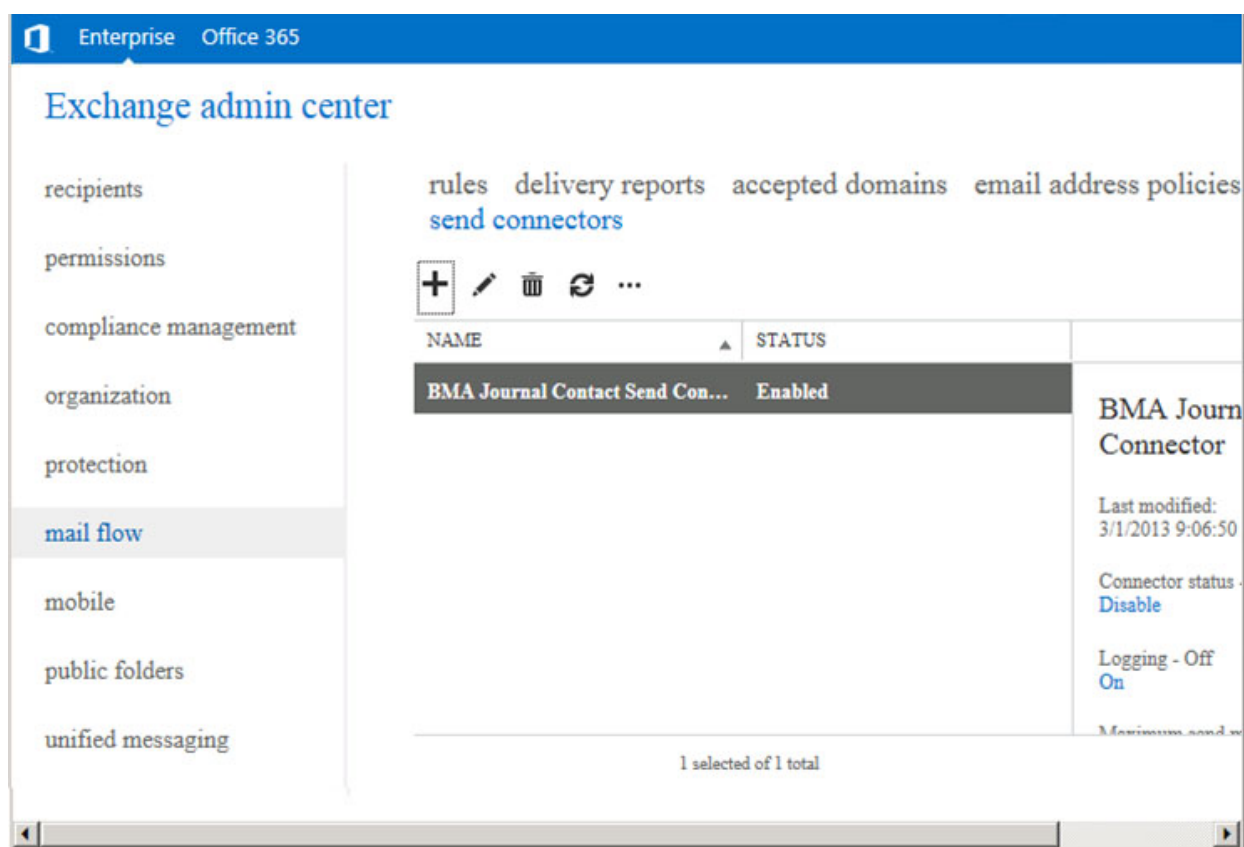
*Source server:
Associate this connector with the following servers containing transport roles. You can also add Edge Subscriptions to this list.

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

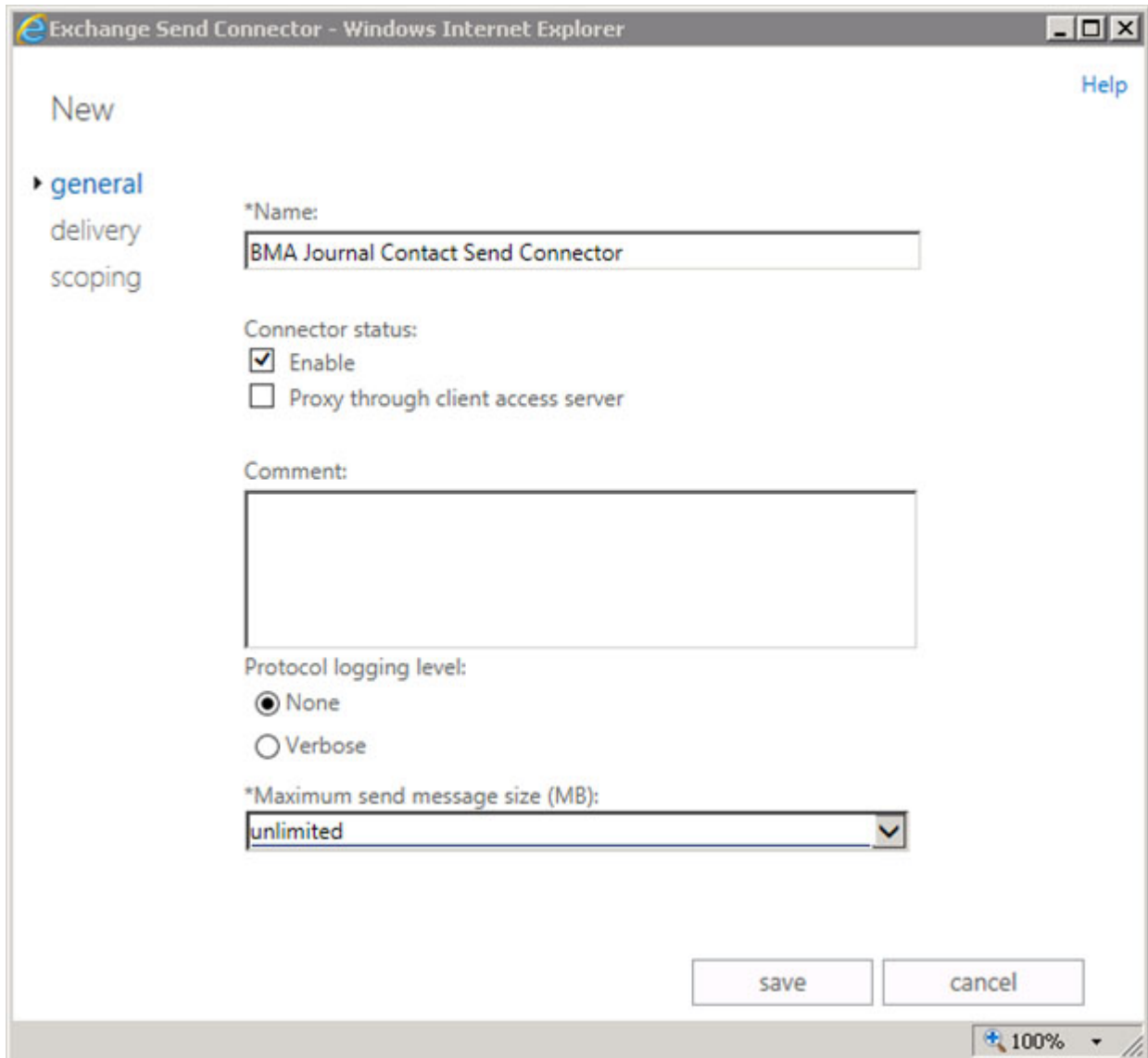
[back](#) [finish](#) [cancel](#)

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:

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

+

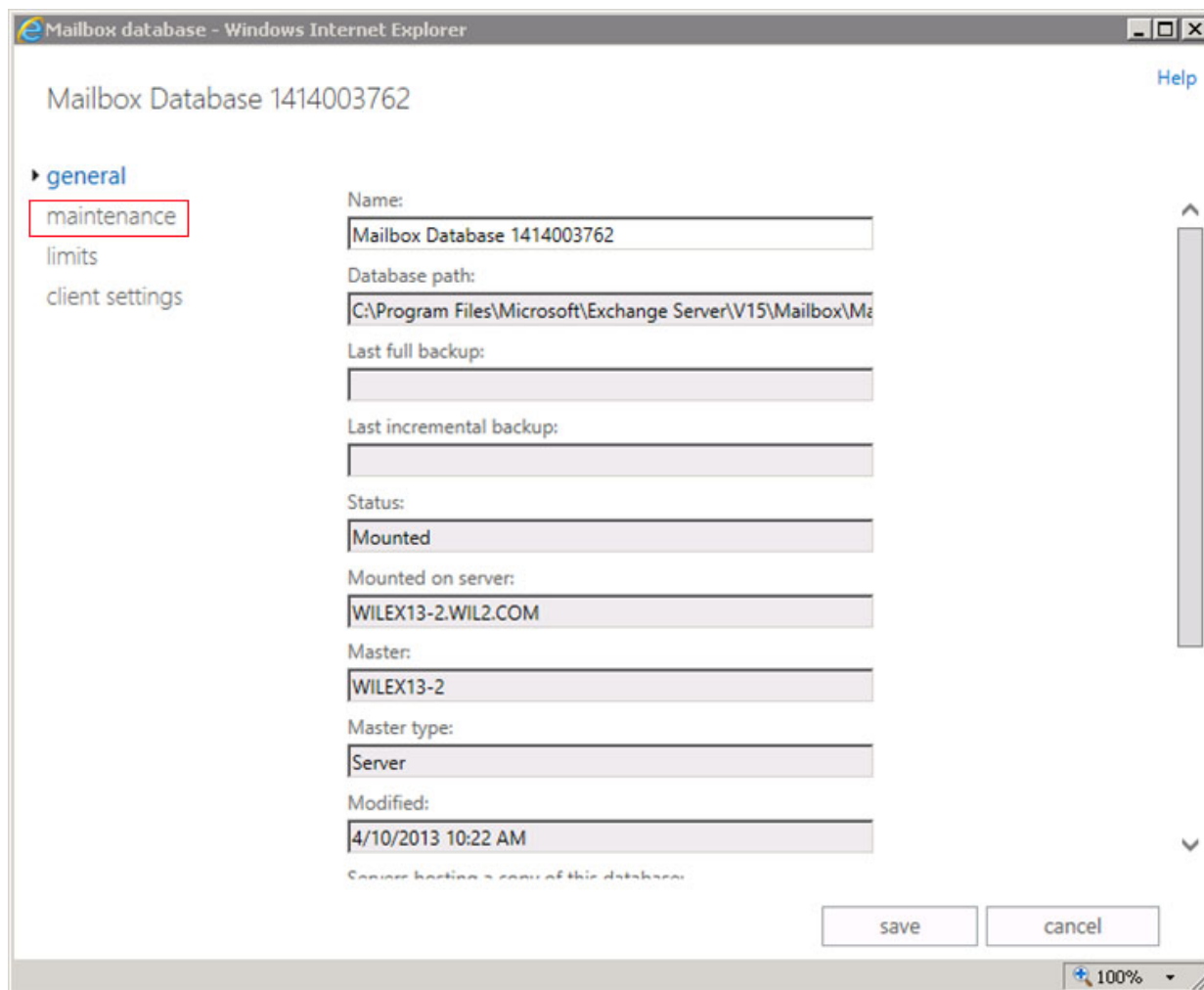
NAME	ACTIVE ON SERVER	SERVICES WITH COPIES	STATUS	BAD COPY COUNT	
Mailbox Database 141...	WILEX13-2	WILEX13-2	Mounted	0	Mailbox Database 141...

1 selected of 1 total

Mailbox Database 141...

Servers
WILEX13-2
Database copies:
Mailbox Database 141...
Active Mounted
Copy queue length: 0
Content index state: H
[View details](#)

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



Mailbox database - Windows Internet Explorer

Mailbox Database 1414003762 [Help](#)

general
maintenance
limits
client settings

Name:
Mailbox Database 1414003762

Database path:
C:\Program Files\Microsoft\Exchange Server\V15\Mailbox\Ma

Last full backup:

Last incremental backup:

Status:
Mounted

Mounted on server:
WILEX13-2.WIL2.COM

Master:
WILEX13-2

Master type:
Server

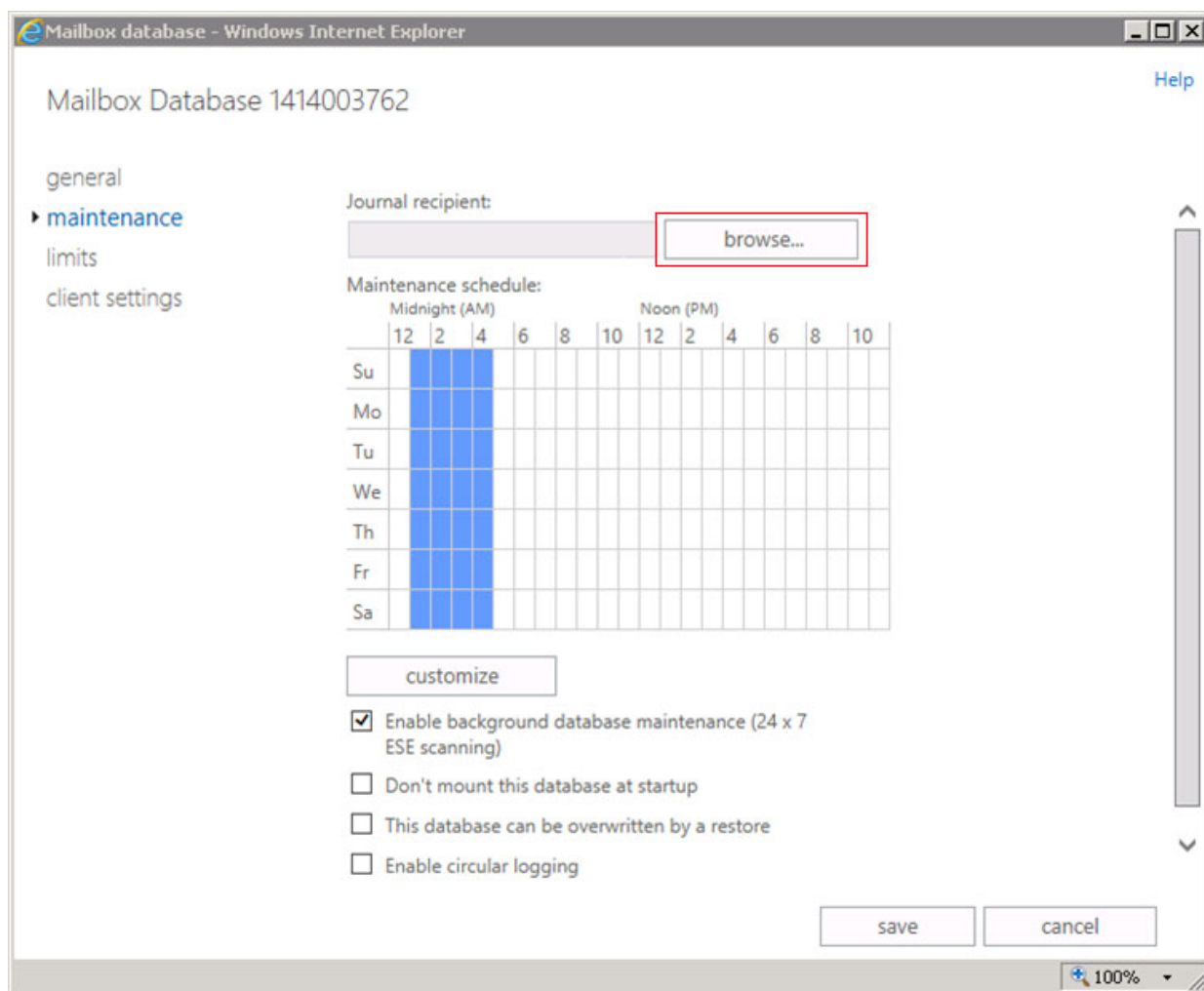
Modified:
4/10/2013 10:22 AM

Server hosting a copy of this database:

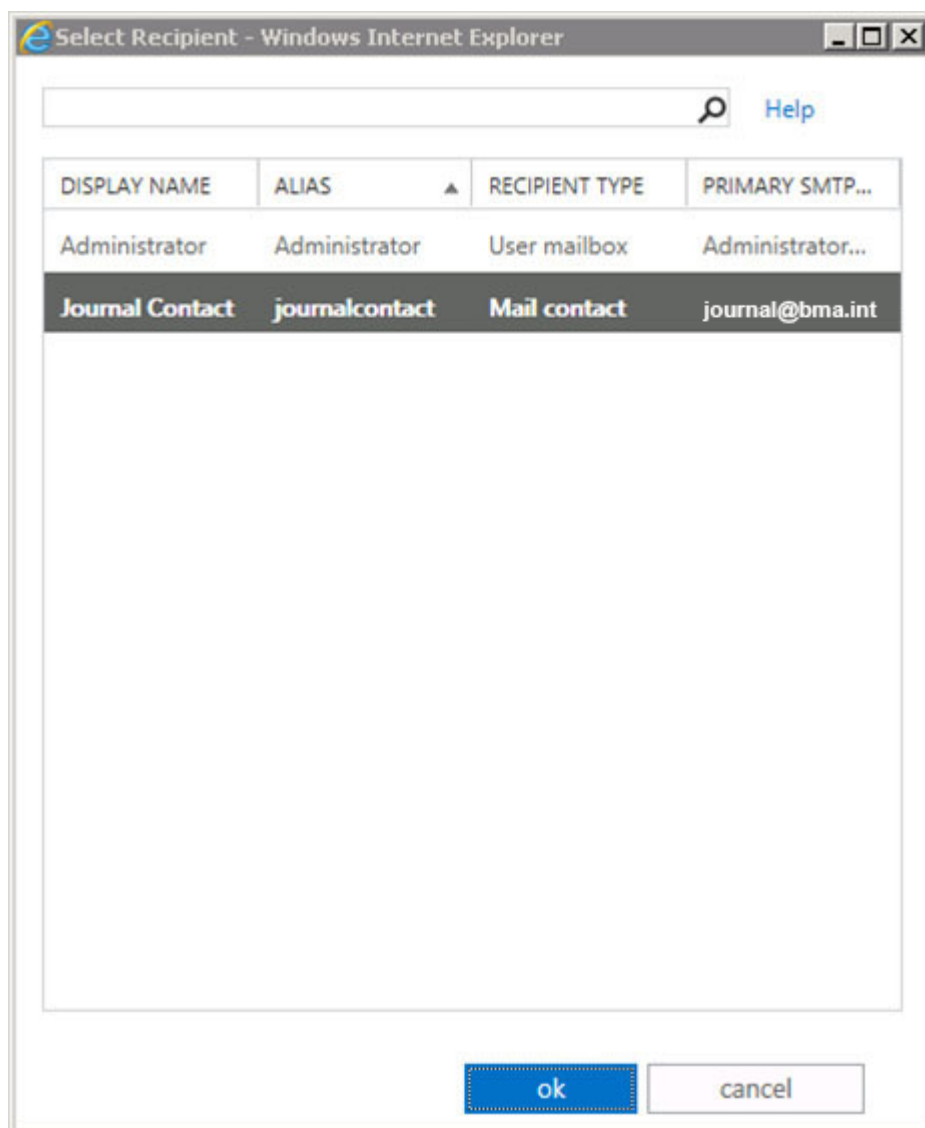
save cancel

100%

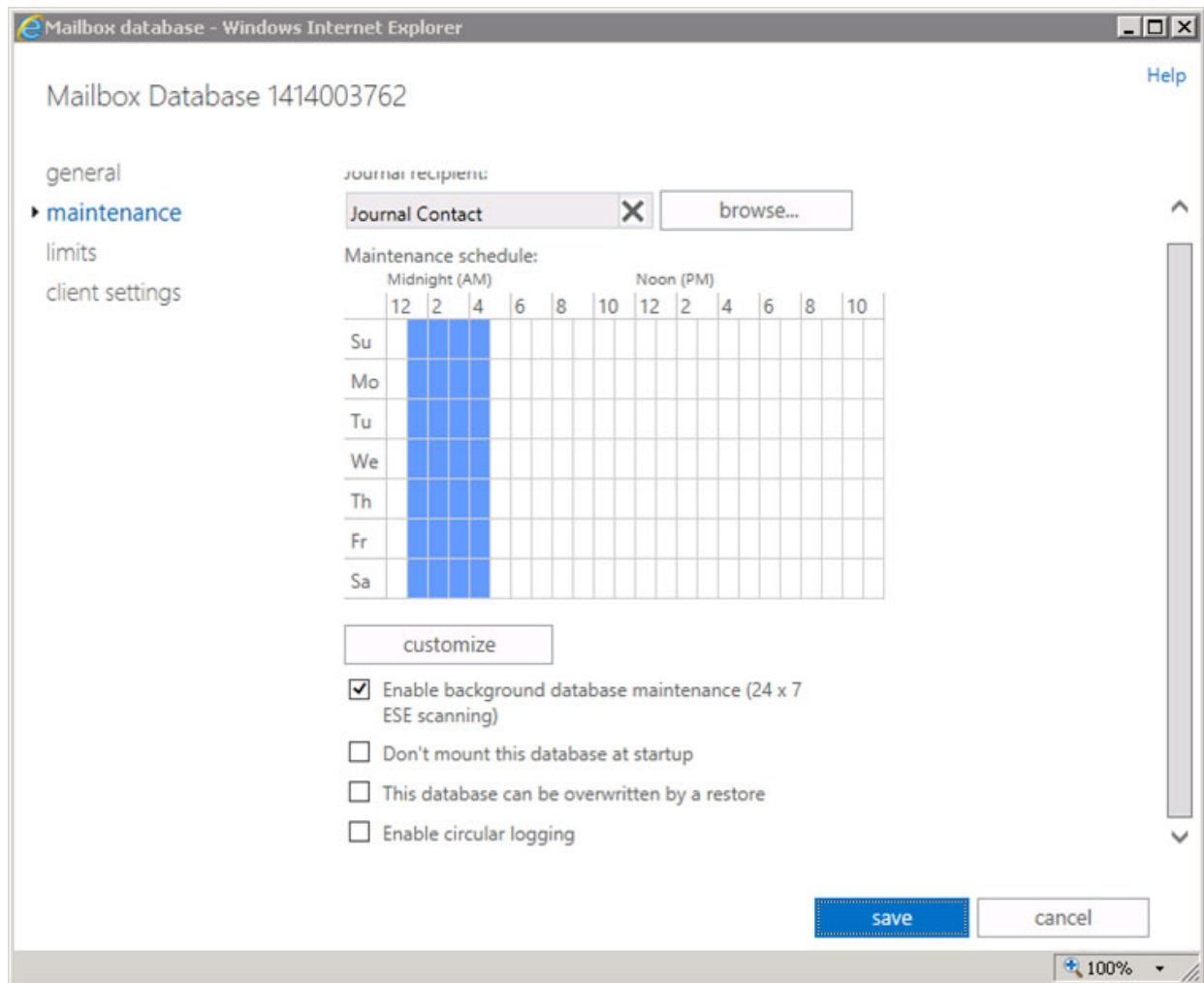
3. In the **maintenance** page, click **browse** following the **Journal recipient** field:



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 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.

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.

Figures

1. MailContact.png
2. NewMailContact.png
3. sendConnector.jpg
4. new_send_connector.jpg
5. new_send_connector2.jpg
6. add_smart_host.jpg
7. smart_host_added.jpg
8. authenticationUpdate.jpg
9. address_space.jpg
10. add_domain.jpg
11. verify_address_space.jpg
12. source_server.jpg
13. verify_listed_servers.png
14. finishStandard.jpg
15. enabledStandard.jpg
16. editUpdate.jpg
17. editConnector.jpg
18. editUpdate.jpg
19. edit_db.jpg
20. mailbox_db_properties.jpg
21. browse_to_recipient.jpg
22. SelectRecipientbmaint.png
23. journal_contact.jpg

© Barracuda Networks Inc., 2024 The information contained within this document is confidential and proprietary to Barracuda Networks Inc. No portion of this document may be copied, distributed, publicized or used for other than internal documentary purposes without the written consent of an official representative of Barracuda Networks Inc. All specifications are subject to change without notice. Barracuda Networks Inc. assumes no responsibility for any inaccuracies in this document. Barracuda Networks Inc. reserves the right to change, modify, transfer, or otherwise revise this publication without notice.