

# Dialogic® Brooktrout® Fax Service Provider Software

Installation and Configuration Guide for the Microsoft Fax Server

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# **Contents**

About this Publication	5
Related Documents	6
Typographical Conventions	
Chapter 1 – Introduction	<b>7</b>
Microsoft Exchange 2010 Inbound Routing	7
Overview of Software and Hardware Installation Steps	
Chapter 2 – Installing Hardware	9
Chapter 3 – Installing Microsoft Fax Server	10
Operating Systems	11
Installing Microsoft Fax Server on Windows Server 2008 and Later	
Installing Microsoft .NET Framework 2.0	13
Chapter 4 – Installing Brooktrout Fax Service Provider So	ftware 14
Installing the Brooktrout FSP Software	15
Entering Telephone Information	22
Chapter 5 – Configuring Brooktrout Fax Products	24
Configuring the Brooktrout Devices on Windows Server OSes	25

Chapter 6 – Configuring Microsoft Fax Server	26
Configuring the Microsoft Fax Server on Windows Server OSes	27
Chapter 7 – Inbound Routing	28
Configuring Incoming Fax Routing Methods on Windows Server OSes	29
Configuring the Routing Methods	29
Enabling Your Route	34

## **About this Publication**

Use this guide to install software and optional hardware to support the Microsoft Fax Server for Microsoft environments using Dialogic® Brooktrout® Fax Service Provider (FSP).

The latest version of the Brooktrout FSP software is available here: http://www.dialogic.com/products/ip\_enabled/FoIP/FSP.htm

### **Related Documents**

This guide, together with the related documents below, explains how to install the Microsoft Fax Server, Brooktrout FSP Software, and a Brooktrout Fax Board or SR140 software licenses and configure the system.

- *Dialogic® Brooktrout® Fax Service Provider Software Release Notes* (contains the latest information)
- Dialogic® Brooktrout® Fax Products Windows End User Guide
- Microsoft Exchange 2010 Configuration Guide

### **Typographical Conventions**

This manual uses the typographical conventions shown in the following table.

Convention	Type of Information
<i>Italic</i> typeface	File, path, directory or program name
Bold monospace typeface	Code or syntax entered by user
Plain monospace typeface	System output of code or syntax
Sans serif typeface	Keys or buttons to press, screen names



The Caution icon is used to indicate an action that could cause harm to the hardware or software.

### 1 - Introduction

The Microsoft Fax Server, which is distributed with your Windows Operating System, provides the ability to fax any printable document and to receive faxes when used with a fax service provider (FSP) and a fax-capable device. The Dialogic® Brooktrout® FSP Software provides these fax processing capabilities when used with the following Brooktrout Fax Products:

- Dialogic® Brooktrout® TruFax® Fax Boards Analog and BRI ISDN
- Dialogic® Brooktrout® TR1034 Fax Boards Analog, BRI ISDN, DID, T1, E1, Ethernet
- Dialogic® Brooktrout® TR1034-N Fax Boards SIP/H.323 T38/G711 Fax over IP
- Dialogic® Brooktrout® SR140 IP Fax Software SIP/H.323 T38/G711 Fax over IP

### Microsoft Exchange 2010 Inbound Routing

The Microsoft Fax Server with Brooktrout FSP software and Brooktrout SR140 is also certified as a Microsoft Exchange Server 2010 Fax Partner Solution, which allows the Microsoft Fax Service to receive routing information from Microsoft Exchange 2010 and send faxes directly to individual user's e-mail inbox.

### Overview of Software and Hardware Installation Steps

You must have Administrative privileges prior to installing the software.

- 1. Install the TR1034/Trufax board. Skip this step if you are using only SR140 fax software.
- 2. Install the Microsoft Fax Server if required.
- 3. Install the Brooktrout FSP software.
- 4. Enter your telephone dialing information.

# 2 - Installing Hardware

Refer to *Installing TR1034* and *TruFax® Hardware* in the *Dialogic® Brooktrout® Fax Products Windows End User Guide* for basic instructions to install the *Dialogic® Brooktrout®* TR1034 Series and *Dialogic® Brooktrout® TruFax®* boards.

This information does not apply to users of the Dialogic® Brooktrout® SR140 Fax Software.

## 3 - Installing Microsoft Fax Server

This chapter describes how to install Microsoft Fax Server when not pre-installed on the system.

By using a Fax Server, you can manage shared fax resources. The procedures in this chapter explain how to install the Fax Server on different Windows versions.

This chapter contains the following major sections:

- Operating Systems on page 11
- Installing Microsoft Fax Server on Windows Server 2008 and Later on page 12
- Installing Microsoft .NET Framework 2.0 on page 13

### **Operating Systems**

The following table outlines the number of supported fax channels by Windows operating system.

Table 1. Channels Supported by the Microsoft Fax Server

Operating System	Channels
Windows Server 2012 and R2 Standard	Unlimited
Windows Server 2008 and later Enterprise and Datacenter Editions	Unlimited
Windows Server 2008 and later Standard Edition	4

# Installing Microsoft Fax Server on Windows Server 2008 and Later

- > Follow the steps below to install the Microsoft Fax Server on Windows Server 2008 and later:
- 1. In the left pane of Server Manager, right-click **Roles**, and then click **Add Roles**.
- 2. In the Add Roles Wizard, on the **Select Server Roles** page, select the **Fax Server** check box. This installs the Fax Server role page, Fax Service Manager, the Fax service, and the Fax printer.
- 3. Follow the instructions in the wizard to set up the Fax Server service account and fax users.
- 4. Continue through the wizard until you reach the **Confirm Installation Selections** page and review the choices that you made.
  Click **Install**
- 5. After the wizard closes, to confirm the installation of the Fax printer, click **Start>Run**, and then type: **control printers**.
- 6. Confirm that a printer named *Fax* exists. If it does not, then restart the computer. (Or, if you cannot restart the computer, stop and restart the Print Spooler service instead. To do this, in Services, in the right pane, right-click **Print Spooler**, and click **Stop**. Then right-click **Print Spooler** again, and click **Start**.)
- 7. More installation and configuration information is available in the following Microsoft link: http://technet.microsoft.com/en-us/library/cc753212(WS.10).aspx

### **Installing Microsoft .NET Framework 2.0**

It is necessary that the Microsoft .NET Framework 2.0 be installed in order for the Dialogic Brooktrout Fax Service Provider to properly install and run. The Microsoft .NET Framework 3.x includes the Framework 2.0. Note that the Microsoft .NET Framework 4 and later *does not* include the Framework 2.0.

- Follow the steps below to install the Microsoft .NET Framework 2.0 on Windows Server 2008 and later:
- 1. In the left pane of Server Manager, right-click **Features**, and then click **Add Features**.
- 2. In the Add Features Wizard, on the **Select Features** page, examine the .NET Framework entries. If .NET 2.0 or .NET 3.x is already selected, you are done. If not, select the box that says .NET Framework 2.0 or .NET Framework 3.x. Continue through the wizard until you reach the Confirm Installation Selections page and click Install.

# 4 - Installing Brooktrout Fax Service Provider Software

This chapter describes how to install your Brooktrout FSP software and enter dialing information.

If your system is configured with a prior version of Brooktrout FSP software, you must uninstall it before beginning the installation for the new Brooktrout FSP software version.

This chapter contains the following major sections:

- Installing the Brooktrout FSP Software on page 15
- Entering Telephone Information on page 22

### **Installing the Brooktrout FSP Software**



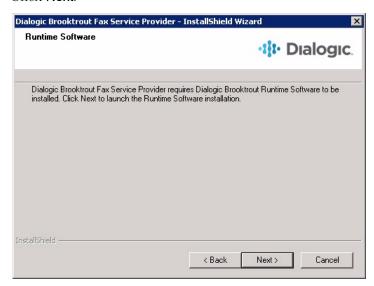
Before installing your Fax Service Provider (FSP) software, log onto your system with full administrative privileges.

- > To install the Brooktrout FSP software:
- 1. Unzip the *brooktrout\_fsp.zip* file. Be sure to maintain the directory structure.
- 2. Run setup.exe.

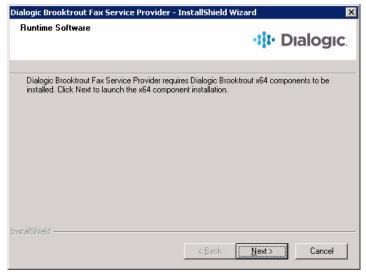
The following screen appears.



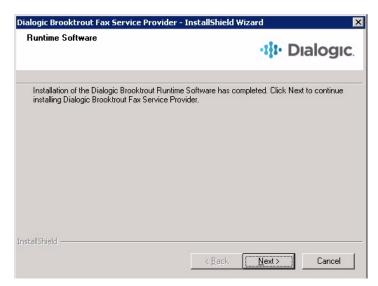
3. Click Next.



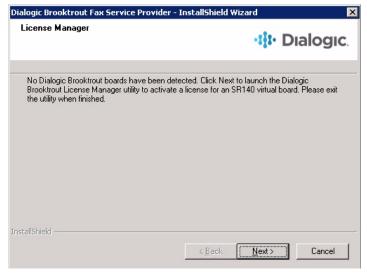
4. This screen above indicates that the Dialogic Runtime Software is required and is installed when you click **Next**. Click **Next**.



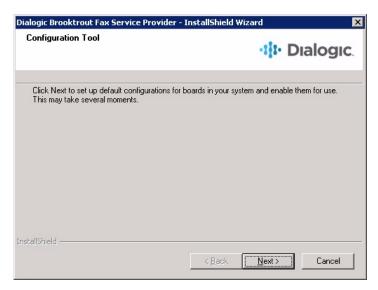
5. The screen above is for x64 systems only and indicates that the Brooktrout x64 Components package is required and is installed when you click **Next**. Click **Next**.



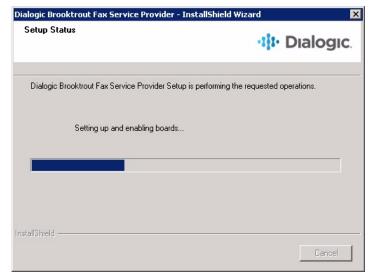
6. The screen above indicates that the Runtime Software installation is complete. Click **Next**.



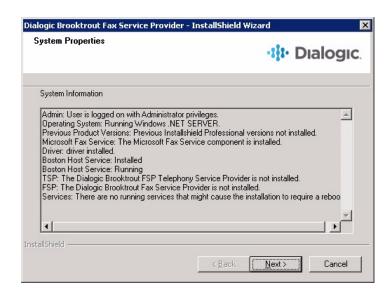
- 7. The screen above appears only if no Brooktrout boards are detected. When you click **Next**, the License Manager utility is launched to activate an SR140 license. (Refer to *Using the License Manager* in the *Dialogic Brooktrout Fax Products Windows User Guide*). Click **Next**.
- 8. Close the License Manager when complete to resume with the Brooktrout FSP installation.



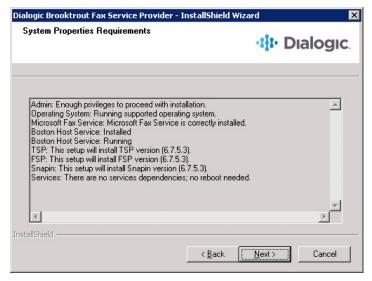
9. The screen above indicates the default configurations will be set up and the boards will be enabled for use. Click **Next**.



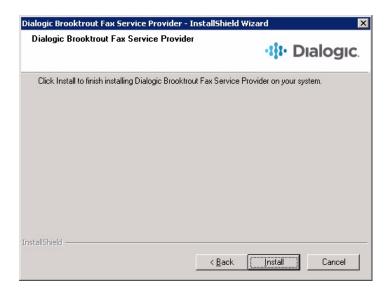
10. When the operation above completes, the following screen appears.



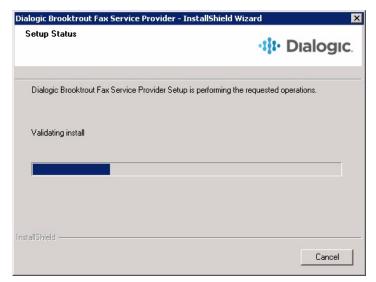
11. Click Next.



12. The screen above indicates some of the properties of the system. Click **Next**.



13. The screen above indicates some properties of the system and some possible problems for Brooktrout FSP installation. Click **Next**.



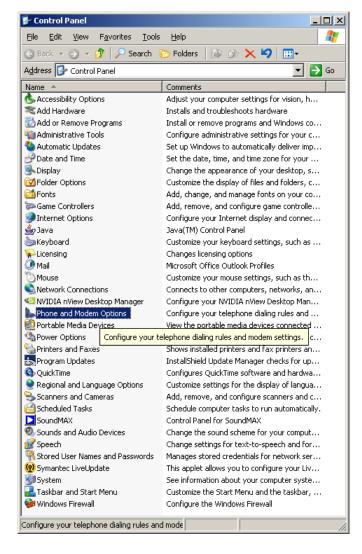
14. When the operation above completes, the following screen appears.



15. The screen above indicates the successful Brooktrout FSP installation. You can select the checkbox if you want to configure the system location information which launches a Microsoft telephony configuration utility. Click **Finish** to exit.

### **Entering Telephone Information**

- ➤ If you want to enter or change the dialing information, follow the steps below.
- 1. Open the **Control Panel** window. This step is skipped if you selected the **Configure system location information now** checkbox at the end of the Brooktrout FSP installation.

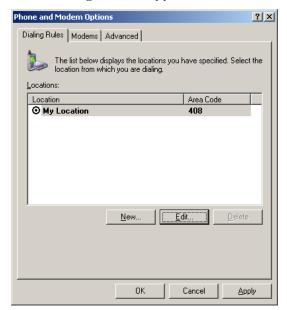


2. Click Phone and Modem Options.

The following screens may appear differently based on the version of the Windows operating system being used.



3. Enter your telephone information and press **OK**. The following window appears:



4. Press OK.

# 5 - Configuring Brooktrout Fax Products

After you install the Brooktrout FSP the fax devices may need to be configured if the default settings need to be modified. Run the Configuration Tool from the Fax Service Provider Properties.

On some system configurations the Microsoft Remote Access Connection Manager service cannot be stopped. This prevents the Telephony service from restarting and can cause some errors when running the Configuration Tool. You can use the Configuration Tool to set the parameters and save them. Reboot for them to take effect.

**Note:** In cases where you do not require the Remote Access Connection Manager, it can be disabled which would remove the need to re-boot. The following Microsoft Article provides additional guidance: http://support.microsoft.com/kb/959041

This chapter contains the following sections:

■ Configuring the Brooktrout Devices on Windows Server OSes on page 25

For more information about the Configuration Tool refer to the *Dialogic® Brooktrout® Fax Products Windows End User Guide*.

# Configuring the Brooktrout Devices on Windows Server OSes

- Follow the steps below to configure the Brooktrout devices on Windows Server OSes:
- 1. Open the Fax Service Manager.
  - a. On Windows Server 2008 and later: Click **Start>Administrative Tools>Fax Service Manager**.
- 2. In the left pane, double-click **Devices** and **Providers**, and then click **Providers**.
- 3. In the right pane, double-click **Dialogic Brooktrout Fax Service**Provider.
- 4. In the Dialogic Brooktrout Fax Service Provider Properties dialog box, click Brooktrout Fax Service Provider.
- 5. To stop the Fax Server, press the **Stop** button. When complete the **Configuration** button will become enabled.
- 6. To configure the Brooktrout devices, press the **Configuration** button. This step starts the Configuration Tool. For information about the Configuration Tool refer to the *Dialogic*® *Brooktrout*® *Fax Products Windows End User Guide*.
- 7. After using the Configuration Tool the Fax Server can be restarted by pressing the **Start** button.

# 6 - Configuring Microsoft Fax Server

This chapter describes how to configure the Microsoft Fax Server. It contains the following sections:

■ Configuring the Microsoft Fax Server on Windows Server OSes on page 27

# Configuring the Microsoft Fax Server on Windows Server OSes

- Follow the steps below to enable the Brooktrout devices to receive:
- 1. Open the Fax Service Manager.
  - a. On Windows Server 2008 and later: Click **Start>Administrative Tools>Fax Service Manager**.
- In the left pane, double-click Devices>Providers, and then click Devices.
- 3. In the right pane, right-click the device you want to configure, click **Properties** and then click the **General** tab.
- 4. To configure whether calls are answered automatically or manually, select the **Receive faxes** check box and then do one of the following:
  - a. Click Automatic Answer to enable the fax device to answer calls automatically, and then type a number for the value in Rings before answering. The default number of rings configured by the Dialogic Brooktrout FSP for each OS is 2.
    - If your fax and telephone do not share a line, you should decrease this number to 2 rings. If your fax and telephone do share a line, and you decide to increase this number, do not increase it so much that the fax sender stops transmission.
  - b. Click **Manual Answer** to enable the fax device to answer calls manually.
- Follow the steps below to enable the Brooktrout devices to send:
- 1. Open the Fax Service Manager.
  - a. On Windows Server 2008 and later: Click **Start>Administrative Tools> Fax Service Manager**.
- 2. In the left pane, double-click **Devices and Providers** and then click **Devices**.
- 3. In the right pane, right-click the device you want to configure, click **Properties**, and then click the **General** tab.
- 4. Select the **Send faxes** check box.

## 7 - Inbound Routing

This chapter describes how to perform inbound routing to individual e-mail addresses in TDM or IP endpoint environments.

You can use routing methods to control what happens to faxes that are received by a fax device managed by the Microsoft Fax Server.

You can use any combination of routing methods to forward received faxes to the following:

- Folder Configuring the Store in a Folder Method on page 29
- E-mail address Configuring the Route Through E-mail Method on page 29
- Printer Configuring the Print Method on page 32
- Exchange UM server Configuring the Route Through Exchange UM Method on page 32

# Configuring Incoming Fax Routing Methods on Windows Server OSes

### **Configuring the Routing Methods**

- 1. Open Fax Service Manager.
  - a. On Windows Server 2008 and later: Click **Start>Administrative Tools>Fax Service Manager**.
- 2. In the left pane, double-click **Fax**, double-click **Devices and Providers**, double-click **Devices**, double-click the device you want to configure, and then click **Incoming Methods**.
- 3. In the right pane, right-click the method you want to configure, click **Properties**, and then do the following:

### Configuring the Store in a Folder Method

To configure the Store in a folder method, click the Store in Folder tab, and then either type the Universal Naming Convention (UNC) path of the folder (\\<network location>\<folder>), or click **Browse** to select the folder.

To enable your routing method refer to *Enabling Your Route on page 34*.

### Configuring the Route Through E-mail Method

Using the Route through e-mail method, the FSP server receives the fax data and then sends it to a mailbox in an e-mail message with the fax included as a .tif attachment.

To configure the Route through e-mail method, click the **E-mail** tab, and then type the e-mail address to which you want incoming faxes to be delivered. To configure incoming routing through e-mail, you must specify the Simple Mail Transfer Protocol (SMTP) settings of the e-mail server.

## ➤ Follow the steps below to configure SMTP settings for e-mail routing:

- 1. Open Fax Service Manager.
- 2. In the left pane, right-click Fax, and then click Properties.
- 3. To enable incoming faxes to be routed to recipients by e-mail, click the **Receipts** tab and then follow the steps below:
  - a. Select the **Use these SMTP settings** for the Route Through E-mail incoming routing method check box.
  - b. In **From e-mail address**, type the e-mail address to which all incoming faxes will be received.
  - c. In **Server address**, type the Simple Mail Transfer Protocol (SMTP) address of the mail server to which incoming faxes will be received.
  - d. In **Port**, type the port number.
- 4. Also on the **Receipts** tab, click **Authentication**. Based on how your SMTP server is set up, do one of the following:
  - Click **Anonymous access** if this is sufficient to access the SMTP server.
  - Click Basic authentication>Credentials, and then type a user name and password.
  - Click Integrated Windows Authentication if NTLM authentication is needed to access the SMTP server, click Credentials, and then type a user name and password.

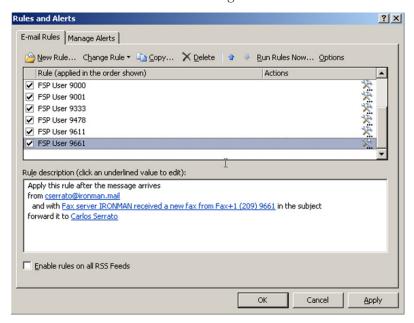
To enable your routing method refer to *Enabling Your Route on page 34*.

The Route through e-mail method can also be used to integrate the Dialogic® Brooktrout® Fax Service Provider Software with e-mail servers when the DID number is available, because the individual called fax number is included in the e-mail subject line. This capability can be used on many e-mail servers such as Microsoft Exchange 2003. The following are some common methods:

Route all faxes to an existing user who then forwards the fax to the intended recipients. This method gives an existing user the responsibility to manually forward all faxes received to the intended recipients. When configuring the Route through e-mail method, set Mail to with the e-mail of the user given the responsibility to forward the received faxes to the intended recipients.

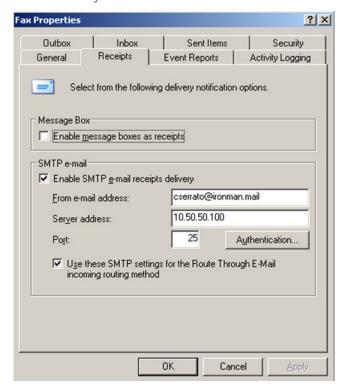
- Route all faxes to a common mailbox that all users can use. This method gives all users access to a pool of faxes stored in one shared mailbox. For more details see the Microsoft article 311529: SBS: How to configure the Shared Fax service to route incoming fax jobs to a common inbox. http://support.microsoft.com/kb/311529
- Route all faxes to an FSP user configured with rules/scripts to automate the forwarding of the fax to the intended recipients. This method gives an FSP user the responsibility to automatically forward faxes to the intended recipients by using rules or scripts.

Match the sender address and the contents of the subject line. The following screen shows an example how to configure Microsoft Office Outlook 2007 using this method:



On this rule, all e-mail received from the FSP user *cserrato@ironman.mail* with the subject line Fax server IRONMAN received a new fax from Fax+1 (209) 9661 are forwarded to the recipient Carlos Serrato. Create a new rule for each of your FSP users using their DID number to match the subject.

On the FSP server, the FSP user will be the field **From e-mail address** in the **Fax Properties**. The field **Server address** is the IP address or hostname for your e-mail server.



### **Configuring the Print Method**

To configure the Print method, click the **Print** tab, and then type the UNC path of the printer location.

To enable your routing method refer to *Enabling Your Route on page 34*.

# Configuring the Route Through Exchange UM Method

This section describes how to integrate Exchange 2010 into the Brooktrout Fax Products configuration.

Microsoft Exchange Server 2010 Unified Messaging (UM) relies on certified fax partner solutions for enhanced fax functionality such as outbound fax or fax routing.

The Microsoft Fax Server with Brooktrout FSP software and Brooktrout SR140 Fax Software is certified as a Microsoft Exchange Server 2010 Fax Partner Solution.

By default, when you install the Unified Messaging server role, the server is not configured to allow incoming fax messages to be delivered to a UM-enabled user. Instead, the UM server redirects incoming fax calls to a certified fax partner solution. The fax partner's server receives the fax data and then sends it to the recipient's mailbox in an e-mail message with the fax included as a .tif attachment.

Routing to Exchange 2010 is supported only with SIP fax devices. PSTN and H.323 fax devices are unable to receive the routing information of the Exchange user.

## Configuring Incoming Fax Routing to the Exchange UM Partner E-mail

- Follow the steps below to configure incoming fax routing to the Exchange UM partner e-mail:
- 1. Open Fax Service Manager.
  - a. On Windows Server 2008 and later: Click **Start>Administrative Tools>Fax Service Manager**.
- 2. In the left pane, double-click **Fax**, double-click **Devices** and **Providers**, double-click **Devices**, double-click the device you want to configure, and then click **Incoming Methods**.
- 3. In the details pane, right-click the Route through Exchange UM Partner e-mail method, and then click Enable to enable the method, or Disable to disable it. To configure incoming routing through Route through Exchange UM Partner e-mail, you must specify the Simple Mail Transfer Protocol (SMTP) settings of the e-mail server. These settings are not the same as the ones used by the Route through e-mail method.
- 4. In the left pane, click **Fax**, double-click **Incoming Routing** and then click **Global Methods**.
- 5. In the right pane, right-click the **Route through Exchange UM Partner e-mail** method, click **Properties**, and then do the following:
  - a. Select the Exchange UM Partner e-mail tab.

- b. In **From Display Name**, type the display name of the user sending e-mail on behalf of the fax server.
- c. In **From e-mail address**, type the e-mail address of the user sending e-mail on behalf of the fax server.
- d. In **Server address**, type the Simple Mail Transfer Protocol (SMTP) address of the Exchange UM server to which incoming faxes will be sent.
- e. In **Port**, type the port number.
- f. If the Exchange UM server requires authentication set the following:
- User name type a user name with credentials on the Exchange UM server.
- Password type the user's password.
- Confirm Password re-type the user's password.
- 6. For more details refer to the *Microsoft Exchange 2010 Configuration Guide*.

To enable your routing method refer to *Enabling Your Route on page 34*.

### **Enabling Your Route**

Once the incoming methods have been configured, in the details pane, right-click each method, and then click **Enable** to enable the method, or **Disable** to disable it. (You may want to disable a method if, for example, you want to temporarily disable printing because the printer is down and faxes are getting stuck in the Inbox.)