

# SMTP Server Setup Instructions



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## Purpose

This document describes the instructions for setting up the SMTP (Simple Mail Transfer Protocol) server to support the OPSoftware email based products. You only need to follow the SMTP server setup instructions if you do not already have your SMTP server activated.

## Before you Begin

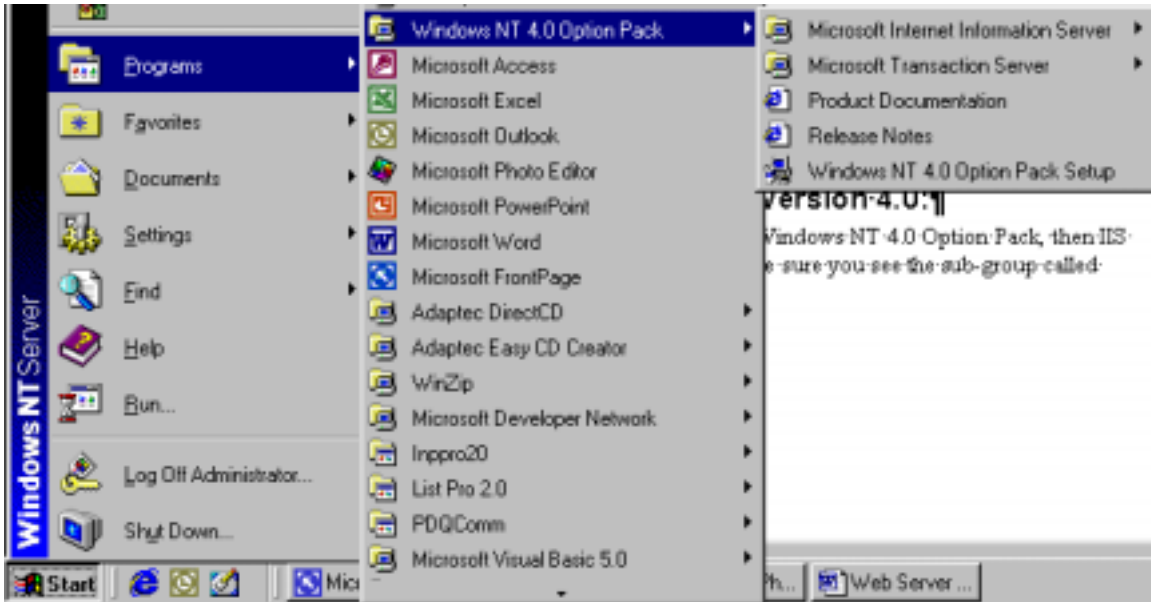
If you have already installed and set up Internet Information Services (IIS), you may already have the SMTP server installed. Check the topics on how to tell if SMTP server is already installed before performing the installation steps.

## Install Simple Mail Transfer Protocol (SMTP)

Simple Mail Transfer Protocol and its virtual server are required to process your out-bound emails. This common service may already be installed on your server. Most vendors install this service by default.

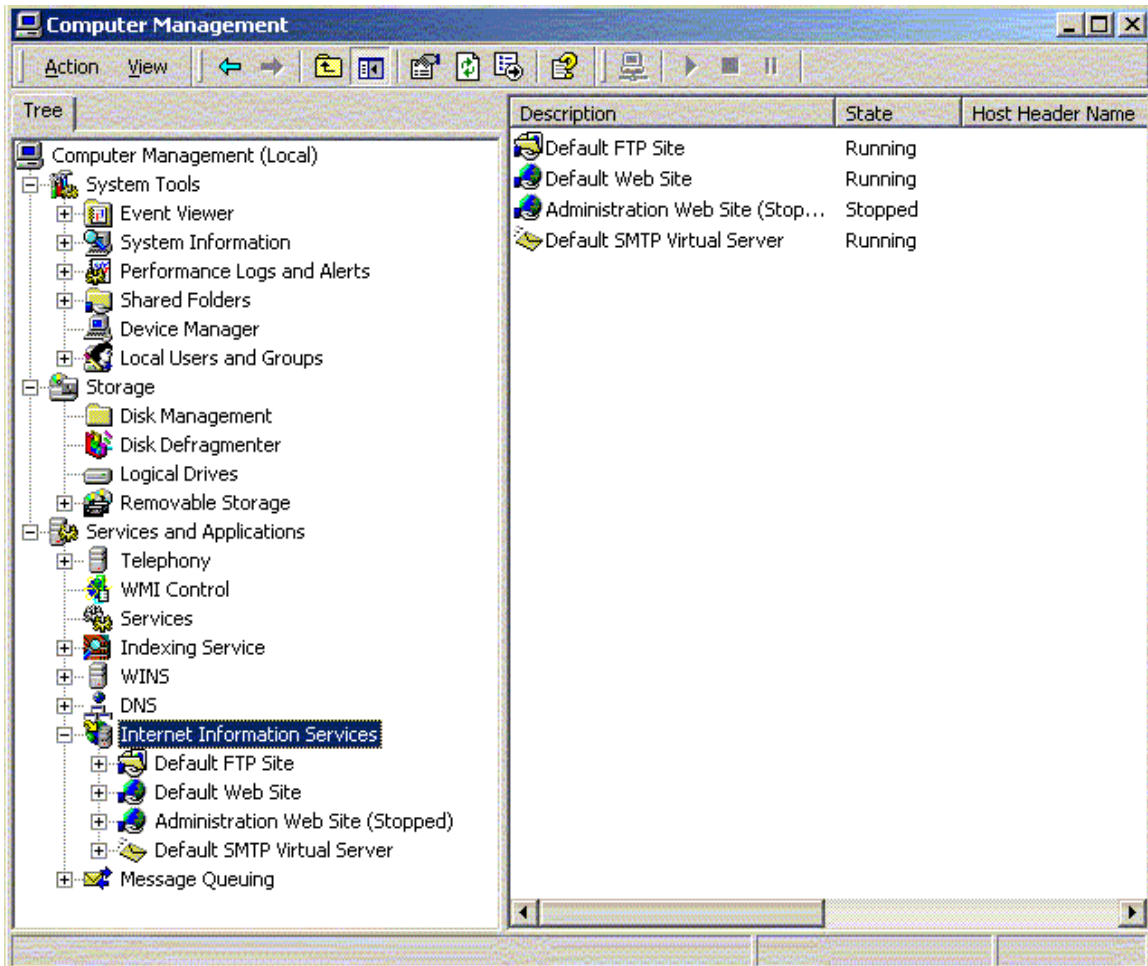
### ***How to tell if SMTP is installed on Windows NT version 4.0:***

Choose Start – Programs. If you do not see a program group called Windows NT 4.0 Option Pack, then SMTP is probably not installed. If you do see this program group, you must also make sure you see the sub-group called Microsoft Internet Information Server. Choose the “Internet Service Manager” item from the “Microsoft Internet Information Server” group. Expand your Internet Server groups and look for the “Default SMTP Site” item.



## How to tell if SMTP is installed on Windows 2000:

Right click on My Computer and choose Manage. Expand the Services and Applications group and make sure you see Internet Information Services. If you do not see this item, and the corresponding Default SMTP Virtual Server, then SMTP is not installed on your server.



## **Installing SMTP**

Installing the SMTP server depends on the operating system you are using. You cannot install SMTP server on Windows 95, 98, or ME.

### ***Installing SMTP Server on Windows NT 4.0:***

Insert the OPSoftware ePower CD in your CD drive. Choose Start – Run and then click the Browse Button. Browse to your CD drive. Double click the Server folder. Double click the NT4 folder. Double click the NTOptPk folder. Double click the SETUP.EXE file. Click the OK Button. This will start the NT Option Pack Setup.

You may receive a message that the product has not been tested with your current service pack. Choose yes to continue.

Choose next to begin the setup.

Choose custom setup if asked.

Choose Add/Remove if asked.

Scroll down the list until you see “Internet Information Server (IIS) and click on this line. Do not click the check box, just click on the line to select it!

Click the “Show Subcomponents” button to show the subcomponents of Internet Information Server.

Scroll down the subcomponents list and make sure “SMTP Service” is checked.

Click the OK Button to accept the SMTP selection.

Choose next to continue the installation. You may be requested to provide locations for the install files. You can change the drive letter, but it is better to leave the default paths alone.

Re-boot your server after installing SMTP Server.

### ***Installing SMTP Server on Windows 2000:***

Insert your Windows 2000 CD in the CD drive. This CD should auto start and you should choose the Install Add-On Components. You can also use Start – Settings – Control Panel – Add Remove Programs and then choose Add/Remove Windows Components.

Click on the “Internet Information Services (IIS)” component and then click the Details Button.

Scroll down the details list and make sure “SMTP Service” is checked.

Click the OK Button to accept the SMTP selection.

Click next to install the SMTP Service.

## **Apply current service packs**

You must make sure your computer has the most recent service packs applied to properly run SMTP Server.

### ***Windows NT 4.0 Service Pack:***

As of the writing of this document, Service Pack 6 was the current release. You should visit the Windows Update site on Microsoft's web site to confirm the latest service pack. You can also download and apply these service packs from the Windows Update site.

### ***Windows 2000 Service Pack:***

As of the writing of this document, Service Pack 2 was the current release. You should visit the Windows Update site on Microsoft's web site to confirm the latest service pack. You can also download and apply this service pack from the Windows Update site.

## **Apply last minute patches**

There are recent security patches critical to the operation of SMTP Server and the other Internet Information Services. These patches were released after the service packs for both NT 4.0 and Windows 2000. You must visit the Windows Update site and download and apply all critical updates for your server.

You may need to download many updates. You need to keep returning to this site until no more critical or recommended updates are shown.

### ***Windows Update Web Site:***

You can get to the Windows Update site by going to [www.microsoft.com](http://www.microsoft.com) and then choosing the Downloads link and then Windows Update.

## Setting SMTP Server Properties

These instructions are similar for both Windows NT 4.0 and W2K. The screens are from Windows 2000.

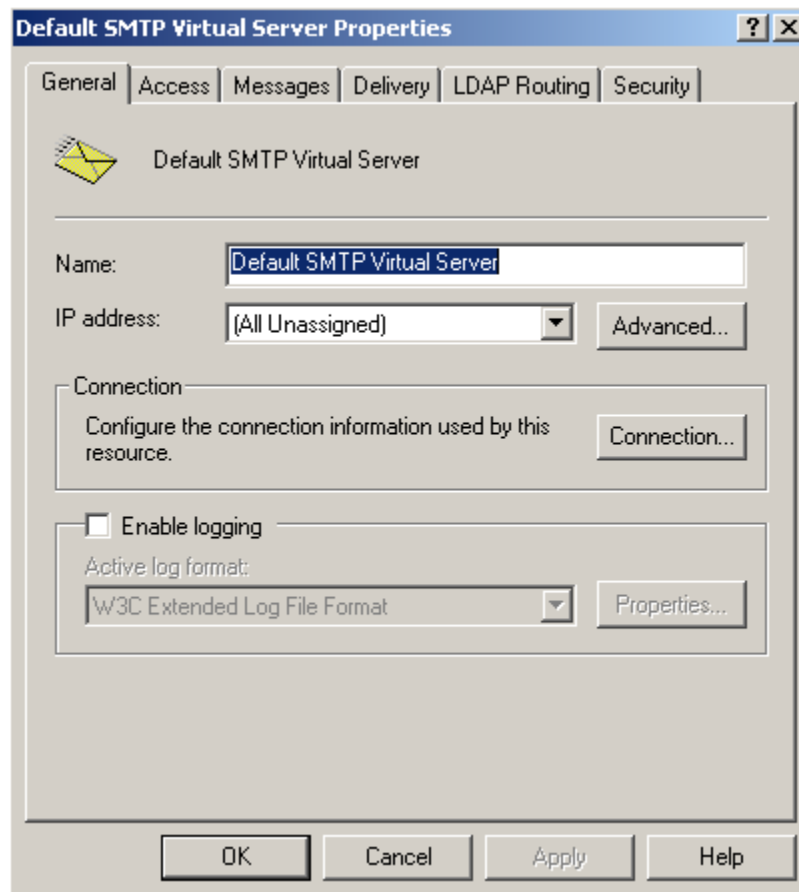
You must first locate your SMTP server.

**Windows 2000:** Right-click on My Computer and choose manage. Expand “Services and Applications” and then expand “Internet Information Services”. Right-click on “Default SMTP Virtual Server” and choose “Properties” from the pop-up menu.

**Windows NT 4.0:** Choose Start – Programs. Choose “Windows NT 4.0 Option Pack”, “Microsoft Internet Information Server”, “Internet Service Manager” Expand your Internet Server groups and look for the “Default SMTP Site” item. Right-click on “Default SMTP Site” and choose “Properties” from the pop-up menu.

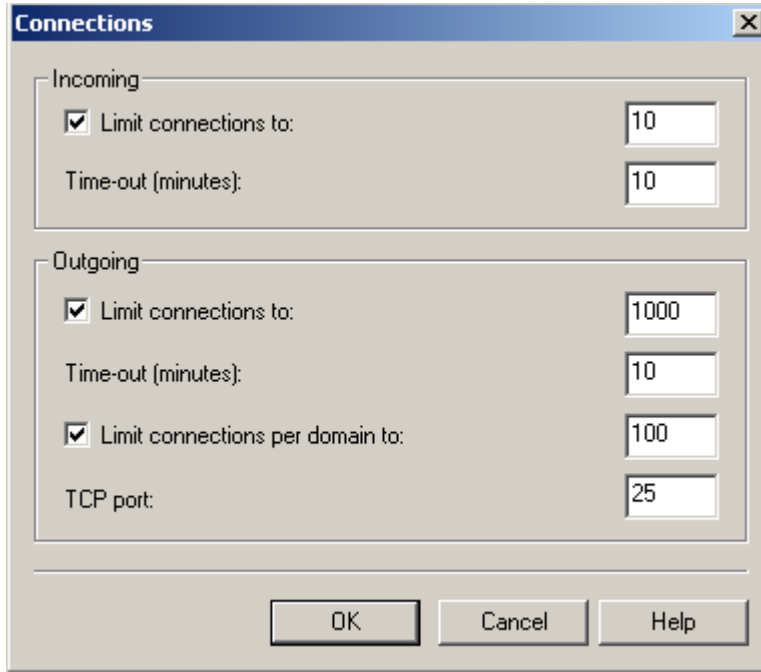
### ***General properties:***

The General Properties tab should not normally require any changes.



## Connection Options:

Clicking the Connections Button from the General Tab allows you to control connection limits. The defaults should be acceptable for most installations. If your activity becomes heavy, you may need to adjust the time-outs and maximum connections.



The screenshot shows a dialog box titled "Connections" with a close button (X) in the top right corner. The dialog is divided into two sections: "Incoming" and "Outgoing".

**Incoming:**

- Limit connections to: 10
- Time-out (minutes): 10

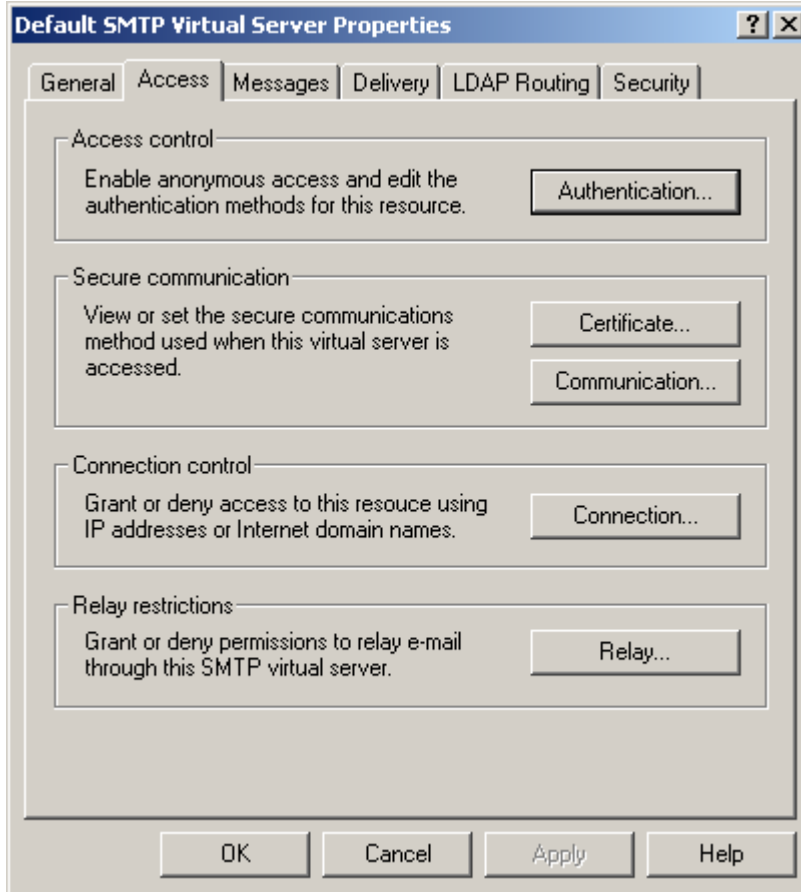
**Outgoing:**

- Limit connections to: 1000
- Time-out (minutes): 10
- Limit connections per domain to: 100
- TCP port: 25

At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

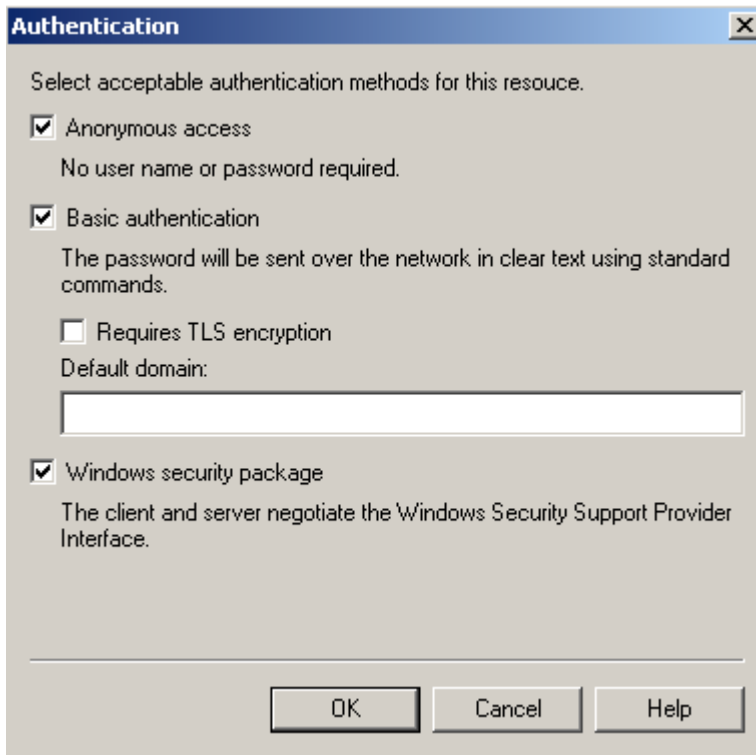
## Access Tab:

The Access Tab controls access to your SMTP virtual server. There are several other buttons on this screen each displaying different configuration properties.



## Authentication

The default settings for this screen should be acceptable in most situations. If you do not select the Anonymous access option, then users cannot email from your Websites.



The image shows a Windows-style dialog box titled "Authentication" with a close button (X) in the top right corner. The dialog contains the following text and controls:

- Text: "Select acceptable authentication methods for this resource."
- Option 1:  Anonymous access  
Text: "No user name or password required."
- Option 2:  Basic authentication  
Text: "The password will be sent over the network in clear text using standard commands."
- Option 3:  Requires TLS encryption  
Text: "Default domain:"  
Text input field: [Empty]
- Option 4:  Windows security package  
Text: "The client and server negotiate the Windows Security Support Provider Interface."

At the bottom of the dialog, there are three buttons: "OK", "Cancel", and "Help".

## Secure Communications

Secure communications are not required for DB2 email notifications.

## Connection

You can limit access to the SMTP virtual server through the connection screen. If you limit connections, then make sure your Web Server and DB2 Server have access.

Select which computers may access this virtual server:

Only the list below

All except the list below

Computers:

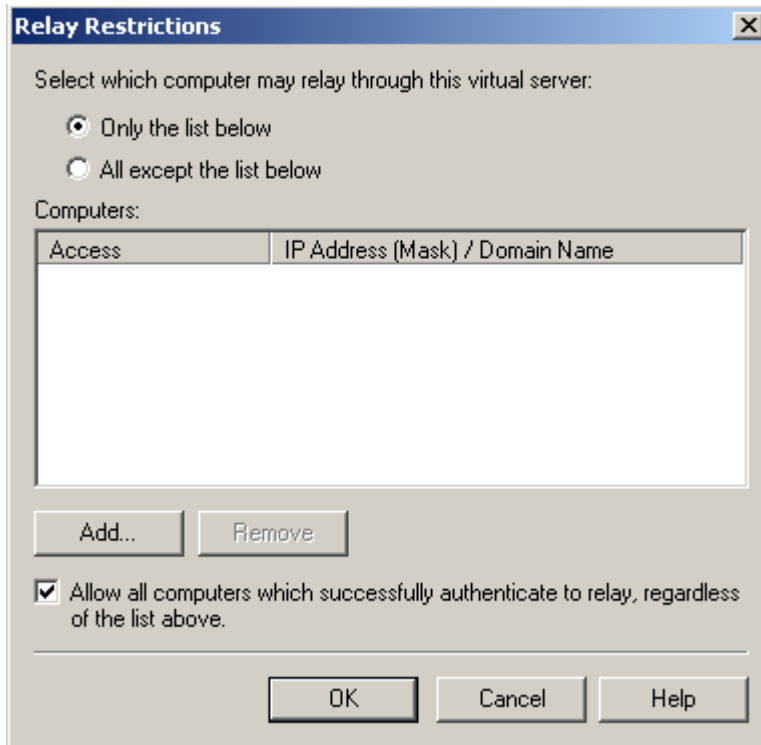
Access	IP Address (Mask) / Domain Name
--------	---------------------------------

Add.. Remove

OK Cancel Help

## Relay

Normally, you should not allow any computer to relay through your SMTP Server.



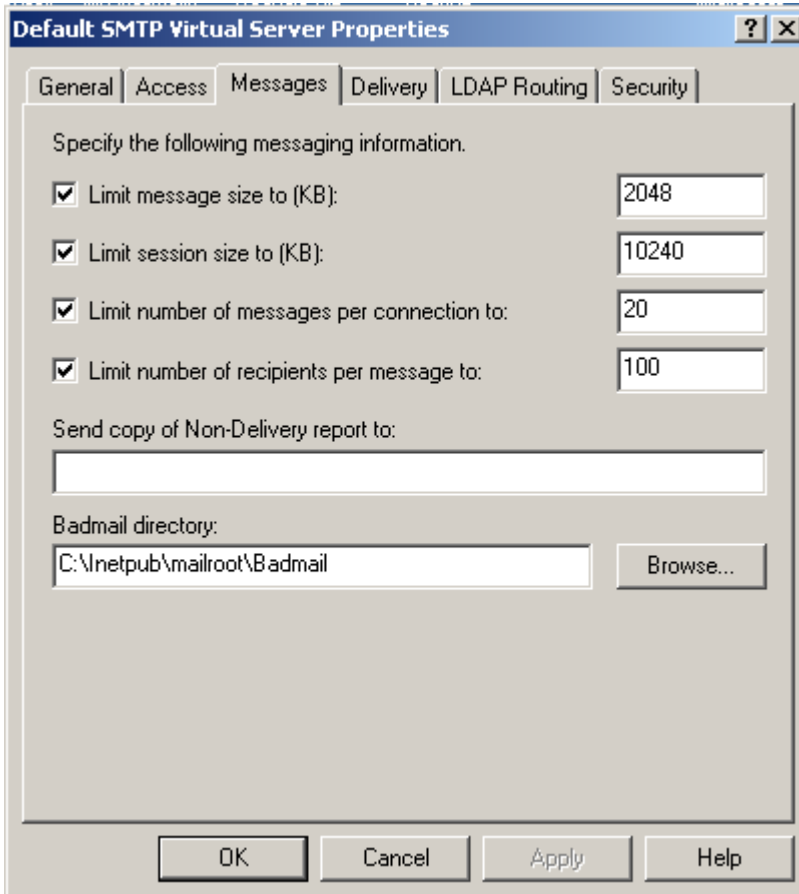
The image shows a Windows-style dialog box titled "Relay Restrictions". It contains the following elements:

- A title bar with the text "Relay Restrictions" and a close button (X).
- Text: "Select which computer may relay through this virtual server:"
- Two radio buttons:
  - Only the list below
  - All except the list below
- Text: "Computers:"
- A table with two columns: "Access" and "IP Address (Mask) / Domain Name". The table is currently empty.
- Two buttons: "Add..." and "Remove".
- A checked checkbox with the text: "Allow all computers which successfully authenticate to relay, regardless of the list above."
- Three buttons at the bottom: "OK", "Cancel", and "Help".

## Messages Tab

Depending on the volume and size of individual emails you will be sending, you may need to adjust the values on this tab.

It is suggested that you enter a valid email address in the “Send copy of Non-Delivery report to” box. This will help in debugging messaging problems. You can always remove this email address at a later date.



The screenshot shows the 'Default SMTP Virtual Server Properties' dialog box with the 'Messages' tab selected. The dialog has a title bar with a question mark and a close button. Below the title bar are five tabs: 'General', 'Access', 'Messages', 'Delivery', 'LDAP Routing', and 'Security'. The 'Messages' tab is active and contains the following settings:

- Specify the following messaging information.
- Limit message size to (KB): 2048
- Limit session size to (KB): 10240
- Limit number of messages per connection to: 20
- Limit number of recipients per message to: 100
- Send copy of Non-Delivery report to: [Empty text box]
- Badmail directory: C:\inetpub\mailroot\Badmail [Browse... button]

At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

## ***Delivery Tab:***

You can adjust the delivery re-tries and delays if desired. There are also two important buttons on this screen that determine how messages are delivered.

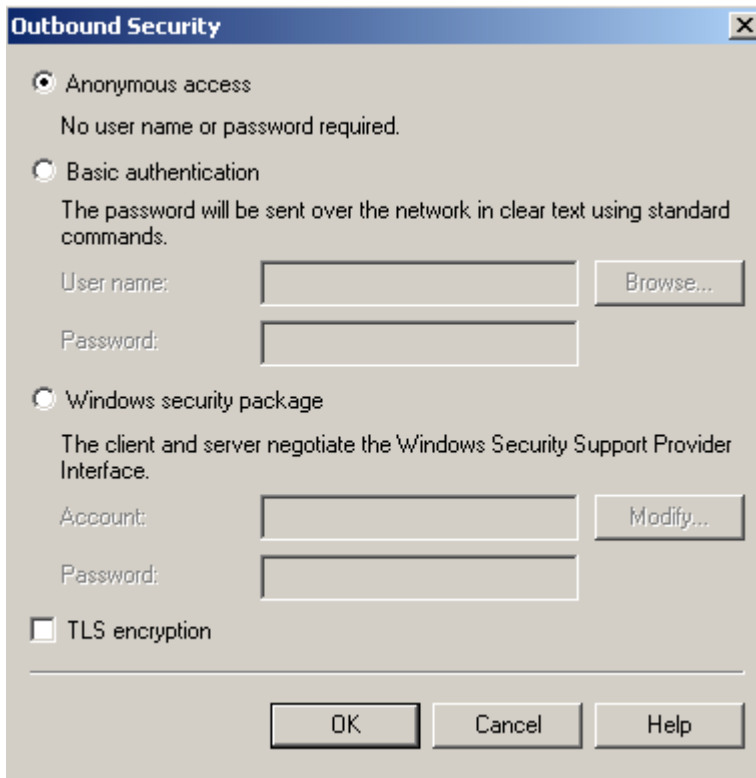
The screenshot shows the 'Default SMTP Virtual Server Properties' dialog box with the 'Delivery' tab selected. The dialog has a title bar with a question mark and a close button. Below the title bar are tabs for 'General', 'Access', 'Messages', 'Delivery', 'LDAP Routing', and 'Security'. The 'Delivery' tab is active and contains two sections: 'Outbound' and 'Local'. Each section has several settings with input fields and dropdown menus. At the bottom of the dialog are buttons for 'Outbound Security...', 'Advanced...', 'OK', 'Cancel', 'Apply', and 'Help'.

Section	Setting	Value	Unit
Outbound	First retry interval (minutes)	15	minutes
	Second retry interval (minutes)	30	minutes
	Third retry interval (minutes)	60	minutes
	Subsequent retry interval (minutes)	240	minutes
	Delay notification	12	Hours
	Expiration timeout	2	Days
Local	Delay notification	12	Hours
	Expiration timeout	2	Days
	Buttons	Outbound Security..., Advanced...	

## Outbound Security Button

Outbound security only applies if you are using a 'Smart Host'. See the smart host or direct delivery topic for more information about smart hosts and direct delivery.

Select the authentication method your smart host uses and then enter your account name and password for the smart host.



The image shows a Windows-style dialog box titled "Outbound Security". It contains three radio button options for authentication methods and one checkbox for TLS encryption. The "Anonymous access" option is selected. Below each radio button option are text labels and input fields for user name and password, along with buttons for "Browse...", "Modify...", "OK", "Cancel", and "Help".

**Outbound Security** [X]

Anonymous access  
No user name or password required.

Basic authentication  
The password will be sent over the network in clear text using standard commands.

User name:  Browse...

Password:

Windows security package  
The client and server negotiate the Windows Security Support Provider Interface.

Account:  Modify...

Password:

TLS encryption

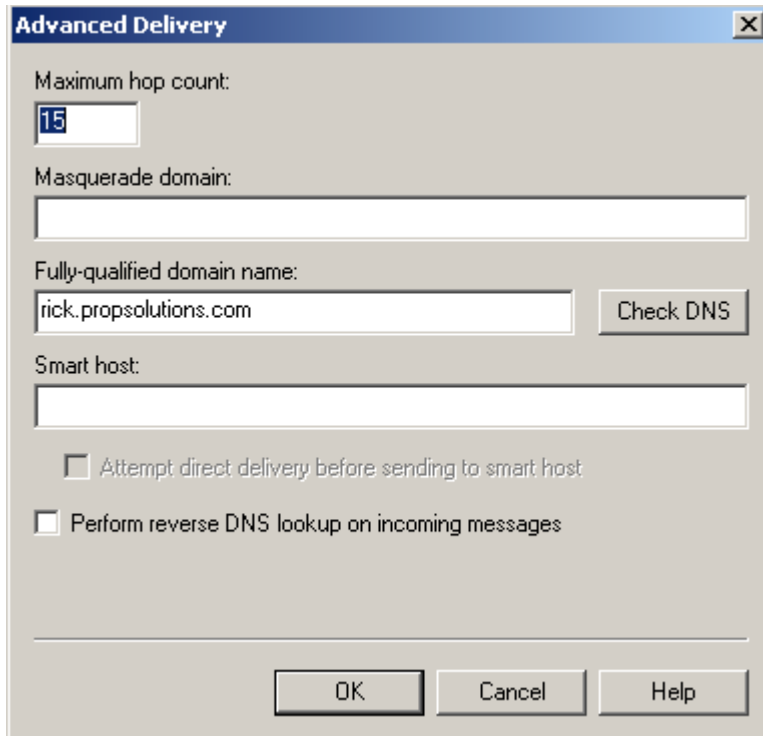
OK Cancel Help

## Advanced Button

The maximum hop count should not normally need to be changed unless you have many servers between you and the final destination.

The fully qualified domain name and the Masquerade domain control the SMTP domain name. The masquerade domain allows you to override the actual domain name.

The Smart Host box contains the name of your smart host server. If you set a smart host, you must also provide authentication with the outbound security button.



**Advanced Delivery**

Maximum hop count:  
15

Masquerade domain:  
[Empty text box]

Fully-qualified domain name:  
rick.propsolutions.com [Check DNS]

Smart host:  
[Empty text box]

Attempt direct delivery before sending to smart host

Perform reverse DNS lookup on incoming messages

[OK] [Cancel] [Help]

## Other Tabs:

The other tabs on the SMTP Server Properties are advanced features and not required for operation with DB2 email notifications.

## Smart Host or Direct Delivery?

Deciding if you should use a smart host, or to just let the SMTP server deliver the messages directly depends upon the number of messages you will be sending, the speed of your Internet connection, the speed of your hardware, and the reliability of your smart host.

A smart host is a full function email system such as Microsoft Exchange Server. It can accept incoming emails using POP3, and send outgoing emails using SMTP. The SMTP server can only send or relay outbound emails.

Also, an ISP using a smart host may provide your email. You log into this smart host to send and receive email.

### ***Direct Delivery:***

Direct delivery means that the SMTP server attempts to deliver the messages directly by connecting to the destination email server and sending the message. While potentially more reliable and faster than using a smart host, some processing power is consumed by attempting the direct delivery. Also, Internet bandwidth is used to transmit the message. Of course, Internet bandwidth would be used anyway unless you are using a separate connection for your smart host.

It is suggested that you try direct delivery first and only switch to a smart host if volume dictates.

### ***Smart Host:***

Using a smart host means that the SMTP server passes all messages off to a 'smart host' to handle final delivery. Smart hosts can cut down on processor usage if the number of retries is large or the smart host is connected to the local network.

Remember, that the SMTP server must perform the initial send to the smart host in all cases. If you are using an ISP smart host, then you will most likely be going out to the Internet to contact this host. Using an Internet ISP smart host does not provide much advantage (you might as well try the final destination) unless the number of retries is large. In fact, one of the settings on the Delivery Tab when you enter a smart host is to try direct delivery first. This option makes more sense if an Internet based smart host is to be contacted for re-trying only.

If you have a local network connected smart host such as Exchange Server, then passing all emails to this host will increase throughput.

## Next Steps

Test your SMTP Server using the DB2 Email Notification. See the DB2 Email Notification instructions for information.