Own Web Now Corp

Troubleshooting ExchangeDefender Delivery

The following document describes the troubleshooting steps that should be taken in order to isolate the exact problem or issue affecting email delivery through ExchcangeDefender.

November 16, 2007

Preface: How ExchangeDefender Works

E-mail delivery problems can be frustrating to deal with but troubleshooting is very quick and easy to isolate. Once the problems are isolated, it is easy to find a solution or at least a workaround to assure timely delivery of email.

ExchangeDefender is by nature a “stateless SMTP proxy” that analyzes inbound and outbound mail flow for the presence of potentially dangerous or unwanted content. In plain English, ExchangeDefender sits between you and the Internet and only lets the safe messages and attachments through.

Troubleshooting Outbound Delivery

The following instructions can help you troubleshoot outbound delivery and find out why messages you send from your network are not getting to their intended recipients.

Local Server

The first step in isolating an outbound mail problems is to check your own server. Make sure your mail client can connect to the mail server, send a test message and make sure it ends up in the correct queues and is properly dispatched to the smarthost at outbound.exchangedefender.com. Your local mail server may have a malfunctioning firewall, stopped services, full hard drives or even be completely offline for routine maintenance or otherwise. If the local mail server is to blame it is likely affecting the entire organization, if it is only affecting a single user the issue is likely local (to the affected account or workstation).

If you identify a local problem consult your system administrator.

Check Outbound Smarthost Connectivity

Internet problems can significantly impact your ability to send email. First check that you can actually resolve the address of our SMTP smarthost at outbound.exchangedefender.com and that you can actually connect to it. For this we will use nslookup and ping tools, available at your command prompt.

On Windows XP / Server 2003 click on **Start**, **Run**, type in *cmd* and hit enter. On Windows Vista click on **Start**, type in *cmd* and hit enter.

> Note: Telnet client is built into Microsoft Windows XP / Server 2003. On Windows Vista and Server 2008 you must install it from the command prompt. Just type in start /w pkgmgr /iu:"TelnetClient"

Step 1: Check DNS

First, let's check the DNS to make sure your sever can locate our smarthost, outbound.exchangedefender.com. From the command prompt type in the following:

nslookup outbound.exchangedefender.com

This is what should happen if everything is working properly. You will receive the IP address of outbound.exchangedefender.com on the last line. Proceed to the next step to see if you can connect to our outbound smarthost.

```
Microsoft Windows [Version 6.0.6000]
Copyright (c) 2006 Microsoft Corporation.  All rights reserved.
```

C:\>nslookup outbound.exchangedefender.com
Server: UnKnown
Address: 192.168.1.1:53

Non-authoritative answer:
Name: outbound.exchangedefender.com
Address: 65.99.192.91

This is what happens if there is a problem, you will receive **Unknown** followed by the error code. If this happens consult your system administrator for help.

C:\>nslookup outbound.exchangedefender.com
Server: UnKnown
Address: 192.168.1.1:53

*** UnKnown can't find outbound.exchangedefender.com: Non-existent domain

Step 2: Connect to outbound.exchangedefender.com

We will now use telnet to check if you can connect to outbound.exchangedefender.com. From the command prompt, telnet to outbound.exchangedefender.com on port 25

C:\>telnet outbound.exchangedefender.com 25
220 outbound.exchangedefender.com ESMTP ExchangeDefender; Fri, 16 Nov 2007 13:20..

If you receive any errors, such as connection failed, connection refused or a very long timeout with eventual disconnection, consult your system administrator. However, if you get the outbound.exchangedefender.com “banner” everything is good so far, continue to step 3.

Step 3: Send a sample email

So far you’ve confirmed that your client is working, that your server is working, that your Internet connection is working and that you can connect to our outbound smarthost at outbound.exchangedefender.com. Now we will try to send a sample email and see if we can get outbound.exchangedefender.com to give us an error.

Just type in the fields in the bold and watch the responses:

C:\>telnet outbound.exchangedefender.com 25
220 outbound.exchangedefender.com ESMTP ExchangeDefender; Fri, 16 Nov 2007
ehlo scrooge.exchangedefender.com
250-outbound.exchangedefender.com Hello scrooge.exchangedefender.com [65.99.255.40], pleased to meet you
250-ENHANCEDSTATUSCODES
250-PIPELINING
250-8BITMIME
250-SIZE

250-DSN
250-AUTH LOGIN PLAIN
250-STARTTLS
250-DELIVERBY
250 HELP
mail from: postmaster@exchangedefender.com
250 2.1.0 postmaster@exchangedefender.com... Sender ok
rcpt to: info@exchangedefender.com
250 2.1.5 info@exchangedefender.com... Recipient ok
data
354 Enter mail, end with "." on a line by itself
Subject: outbound.exchangedefender.com test from Vlad

This is just a test of the outbound.exchangedefender.com system.

Please ignore.

.
250 2.0.0 *lAGIVt85032678* Message accepted for delivery

Congratulations, you've just successfully sent an email. Let's look at the elements. First line is "*ehlo scrooge.exchangedefender.com*" where you would have typed the name of your mail server. This helps identify your mail sever to ours and show the commands that are available. Second line, "*mail from: postmaster@exchangedefender.com*" identifies the sender, this is where you would type in your email address. Third line, "*rcpt to: info@exchangedefender.com*" identifies the recipient, this is where you should type in the person you are trying to send email to. Fourth line is "*data*" and it just tells the SMTP server that you are about to send an email. Fifth line provides the subject, "*Subject: outbound.exchangedefender.com test from Vlad*" followed by the body of the actual message. The last line is just a dot "." by itself, signifying the end of the message.

If all went well, you will receive a message tracking id, in this case: "*lAGIVt85032678*" along with the message "*Message accepted for delivery.*" Congratulations, everything is working perfectly! ExchangeDefender will now take that message and send it to the remote recipient.

Important Note: Any errors, bounces or returns you receive via email after you have received "Message accepted for delivery" clearly indicate a problem on the remote server. Because these errors are due to the configuration on the remote server (RBL, network problem, configuration) and thus outside of our control, we will not be able to assist you. Contact the remote server administrator and find out why they are not accepting your messages. Alternately, remove outbound.exchangedefender.com from your smarthost configuration.

There is one common error that you may encounter while sending email from your network. That error involves rejected relay right after you provide the recipients email:

rcpt to: remoterecipient@remotedomainuser.com

550 5.7.1 remoterecipient@remotedomainuser.com... **Relaying denied. Proper authentication required.**

The error message *"Relaying denied. Proper authentication required"* indicates that outbound.exchangedefender.com does not know who you are and you are not in it's access list. By default ExchangeDefender outbound.exchangedefender.com system will accept messages only from IP addresses that are configured for your server (usually the inbound server IP).

If you encounter this error your IP address may have changed or the IP address you are sending messages from is not in our access list. Please consult your system administrator or ExchangeDefender partner or support to make sure the correct IP address is listed in our access lists.

It's still broken, help!

You've tried everything suggested above and it is still not working. Don't worry, we are here to help. Cut and paste the output from steps 1, 2 and 3 and open up a support request.

Our support team can use the output from the troubleshooting steps you have made and pinpoint the problem and help find a solution. Our support portal is at https://support.ownwebnow.com, just login, click on **Support**, click on **Create New**, and paste in the contents of your sample email session described in step 3.

We look forward to helping you in any way we can!

Troubleshooting Inbound Delivery

The following instructions can help you troubleshoot inbound delivery and find out why messages that were sent to you have not arrived in your mailbox.

General Troubleshooting

The first step in isolating inbound delivery problems is finding out if the issue only affects you or if it affects the entire organization. Symptoms that affect the entire organization can be the expired domain name, misconfigured firewall, lack or improper IP restrictions, Internet Service Provider issues, router problems, available storage space on the server, expired server antivirus or even stopped services on the server itself. These items tend to be the last ones people check and the most frustrating ones to solve because they generally require a significant amount of time to correct after you have tried everything else. So do yourself a favor and check them first!

Check the DNS

On Windows XP / Server 2003 click on **Start**, **Run**, type in *cmd* and hit enter. On Windows Vista click on **Start**, type in *cmd* and hit enter.

> Note: Telnet client is built into Microsoft Windows XP / Server 2003. On Windows Vista and Server 2008 you must install it from the command prompt. Just type in start /w pkgmgr /iu:"TelnetClient"

Step 1: Check DNS

First, let's make sure that your domain name is properly configured to send mail through ExchangeDefender. From the command prompt type in the following:

nslookup –q=mx yoursampledomain.com

If you are correctly configured, you will receive the following response:.

Microsoft Windows [Version 6.0.6000]
Copyright (c) 2006 Microsoft Corporation. All rights reserved.
C:\>**nslookup -q=mx yoursampledomain.com**
Server: UnKnown
Address: 192.168.1.1:53

Non-authoritative answer:
yoursampledomain.com MX preference = 10, mail exchanger = inbound30.exchangedefender.com

yoursampledomain.com nameserver = ns1.ownwebnow.com

yoursampledomain.com nameserver = ns2.ownwebnow.com

If you see the above, you are all good, proceed to step 2. If you see additional MX records, such as failover and secondary MX records you need to remove them before you continue. If you do not see inbound30.exchangedefender.com anywhere in this display, you are not configured to use ExchangeDefender, consider our deployment document available under the **Support** link at http://www.exchangedefender.com/support.php

Step 2: Check your mail server and IP restrictions

Second step in verifying your inbound settings is to check that your mail server is properly configured to accept connections. This is a comprehensive process with full details available on our blog http://www.ownwebnow.com/blog and ExchangeDefender web site http://www.exchangedefender.com

From your mail server console, try to connect to port 25. You should be able to obtain a connection. From the command prompt, type in the following:

C:\>**telnet localhost com 25**
220 scrooge.exchangedefender.com Microsoft ESMTP MAIL Service ready at Fri, 16 N
ov 2007 14:16:42 -0500

You should see your servers SMTP banner which means you are able to connect to your server and it is ready to accept mail via SMTP. If it is not, check SMTP services and make sure they are started. Then check IP restrictions and IP configuration.

If possible, check that you can connect to this server from a remote network. Frequent causes of inbound problems tend to be related to the Internet Service Provider quality of service, unstable connection, packet loss, latency and so on. ExchangeDefender functions as a proxy mail server, so if it cannot establish a solid connection to your mail server it cannot send you mail.

Finally, check the IP address restrictions as per our deployment guide at http://www.exchangedefender.com/support.php - incorrect IP restrictions can lead to delays in email delivery.

Step 3: Send a sample message to yourself

So far you have confirmed your configuration. Your mail server is up and accepting connections, it is configured to use ExchangeDefender and everything checks out. Time to send a test message to yourself through ExchangeDefender.

Just type in the fields in the bold and watch the responses:

C:\>telnet inbound30.exchangedefender.com 25
220 inbound31.exchangedefender.com ExchangeDefender 3; Fri, 16 Nov 2007 14:21:47
ehlo scrooge.exchangedefender.com

250-inbound31.exchangedefender.com Hello scrooge.exchangedefender.com [65.99.255.40], pleased to meet you
250-ENHANCEDSTATUSCODES
250-PIPELINING
250-8BITMIME
250-SIZE
250-DSN
250-AUTH LOGIN PLAIN
250-STARTTLS
250-DELIVERBY
250 HELP
mail from: me@mysamplecorporatedomain.com
250 2.1.0 me@mysamplecorporatedomain.com... Sender ok
rcpt to: me@mysamplecorporatedomain.com
250 2.1.5 me@mysamplecorporatedomain.com... Recipient ok
data
354 Enter mail, end with "." on a line by itself
Subject: ExchangeDefender test from Vlad

This is just a test of the inbound30.exchangedefender.com system.

Please ignore.

.
250 2.0.0 *lAGIVt85032678* Message accepted for delivery

You have just successfully sent an email to yourself through ExchangeDefender, congratulations. If all works out well, you will receive your email in a moment. If you don't, consider the possible issues:

Step 4: When it doesn't work..

If the mail does not arrive, or does not arrive in timely manner, you can count on us to help you figure out what the problem may be. Here are some possible symptoms along with the course of action

Problem: Email arrives, but is delayed minutes or hours..

> **Solution:** Open a support request at https://support.ownebnow.com and paste in the contents of step #3.

Problem: Email never arrives..

> **Solution:** First, check that the message has not fallen into the SPAM or SureSPAM quarantine. Second, check that the IP address configuration is correct, if your IP address has changed or if your configuration to the SMTP server or firewall has changed significantly the message may be spooling on our servers. Finally, if none of the above applies, open a support request at https://support.ownwebnow.com and paste in the contents of step #3.

Problem: Email from remote recipient does not arrive

Solution: Proceed to step #5

Step 5: When it doesn't work from remote senders

Remote troubleshooting of ExchangeDefender is identical to step #3 that you completed to make sure sample messages get through ExchcangeDefender and to your mailbox. If you can get past step #3 successfully, you can proceed to remote troubleshooting, that is, making sure that the remote sender can connect to ExchangeDefender and successfully relay mail. Instruct them to do the following, replacing *senderaddress* and *recipientaddress* with their email address and your email address, respectively.

C:\>telnet inbound30.exchangedefender.com 25
220 inbound31.exchangedefender.com ExchangeDefender 3; Fri, 16 Nov 2007 14:21:47
ehlo someremotemailserver.com
250-inbound31.exchangedefender.com Hello someremotemailserver.com [1.2.3.4], pleased to meet you
250-ENHANCEDSTATUSCODES
250-PIPELINING
250-8BITMIME
250-SIZE
250-DSN
250-AUTH LOGIN PLAIN
250-STARTTLS
250-DELIVERBY
250 HELP
mail from: senderaddress
250 2.1.0 senderaddress .. Sender ok
rcpt to: recipientaddress
250 2.1.5 recipientaddress.. Recipient ok
data
354 Enter mail, end with "." on a line by itself
Subject: ExchangeDefender Remote Test

This is just a test of the inbound30.exchangedefender.com system.

Please ignore.

.
250 2.0.0 *lAGIVt85032678* Message accepted..

Open the support ticket at https://support.ownwebnow.com and we will get to the bottom of it. Once we have the message ID we can track it through our system. If you are an ExchcangeDefender Service Provider you can use the messageid (long string on the last line of the SMTP conversation) to track the message progress through ExchcangeDefender.

If all else fails, open the support request at https://support.ownwebnow.com pasting in the contents of Step #3 and Step #5. These are the very minimum pieces of information we need in order to track the message and isolate the issue.

Final Points

Remember that ExchangeDefender is completely supported and we will gladly look at any SMTP session provided that you have output of the troubleshooting steps that we cannot perform. ExchangeDefender is constantly managed and monitored and issues are addressed immediately, so the bulk of our troubleshooting is trying to pinpoint the isolated issues related to networking or server configuration.

If you are having server issues please consult your mail server vendor. Own Web Now support teams are prohibited from connecting to your mail server as remote administrators or offering you any server troubleshooting steps as that constitutes consulting which is not a part of our service. If you need advice on configuration adjustments, best practices, server optimization and other server or network related issues please consult with a competent technical representative or the vendor of your mail server software. Microsoft Partners can receive free technical support in the Microsoft Newsgroups:

http://members.microsoft.com/partner/newsgroups/default.aspx

As always, at Own Web Now we stand behind our products and gladly support them. If you encounter any issues or would like us to offer assistance please open a support request at https://support.ownwebnow.com

If you like this document and would like to find more please keep an eye on our blog at http://www.ownwebnow.com/blog and our documentation center at http://www.ownwebnow.com/help as well as ExchangeDefender product page at http://www.exchangedefender.com