

# Email Security Appliance Round–Robins to the Next SMTP Route If a Destination Mail Server is Still Responsive



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## Introduction

This document describes how the Email Security Appliance (ESA) behaves when a destination host configured in the SMTP routes responds with a 4.x.x SMTP code.

## Background Information

Simple Mail Transfer Protocol (SMTP) routes allow you to redirect email that is specified for one domain to a different mail exchange (MX) host. A domain that receives email can have multiple destination hosts, each assigned a priority number, similar to an MX record. Destinations with identical priorities are treated in a 'round–robin' fashion where if one or more of the destination hosts does not respond, the messages are delivered to the next functional host.

## Problem

A functional exchange server destination host can respond with a 4.x.x SMTP response that indicates the server cannot accept email due to insufficient system resources. Here is an example of a 4.3.1 insufficient system resource message:

```
4.3.1 - Mail system full ('452', [4.3.1 Insufficient system resources'])
```

## Solution

If a destination host responds with a 4.x.x SMTP response code, no action is required. The ESA automatically acts on the response and delivers the message to the next configured destination host in 'round–robin' fashion.

## Example Scenario

## SMTP Routes

Here is an example of a domain configured with two destination hosts:

SMTP Route Settings			
Receiving Domain: ?	<input type="text" value="example.com"/>		
Destination Hosts:	Priority ?	Destination ?	Port
	<input type="text" value="0"/>	<input type="text" value="192.168.10"/>	<input type="text" value="25"/>
	<input type="text" value="10"/>	<input type="text" value="192.168.20"/>	<input type="text" value="25"/>
	<small>(Hostname, IPv4 or IPv6 address.)</small>		
Outgoing SMTP Authentication:	No outgoing SMTP authentication profiles are configured. See Network > SMTP Authentication		

## ESA Mail Log

Here is an example of an ESA mail log that shows a 4.3.1 SMTP response received from the first configured destination host after which the message is delivered to the second destination host:

```
Wed Jul 2 09:15:07 2014 Info: New SMTP DCID 299 interface 192.168.1.1 address
192.168.1.10 port 25
Wed Jul 2 09:15:07 2014 Info: Connection Error: DCID 299 domain: example.com
IP: 192.168.1.10 port: 25 details: 431-?example.com ESMTP\nMail system full'
interface: 192.168.1.10 reason: unexpected SMTP response
Wed Jul 2 09:15:07 2014 Info: New SMTP DCID 300 interface 192.168.1.1 address
192.168.1.20 port 25
```

**Note:** If all configured destination hosts do not respond, or all the hosts respond with 4.x.x responses, then ESA holds the mail in queue and attempts the delivery later.