



Installing modusGate™ on a Virtual Machine

Prerequisites

modusGate is a Windows®-based software package that can be installed on any Windows Server 2003, 2003 R2, 2008 and 32-bit and 64-bit 2008 R2. This platform can be a dedicated server (hardware) or a virtual machine. This document outlines the installation process for a virtual machine.

Operating System Requirements

Windows Server 2003, 2003 R2, 2008 or 2008 R2 with the following packages installed:

- IIS
- ASP.NET
- .NET framework 3.5 SP1 and .NET 4.0 Extended (for directQuarantine)

Hardware Recommendations

VMware® makes the following recommendations:

- Use Intel®-based Nehalem processors to benefit from its architecture
- Use a VMware vmxnet3 paravirtualized adapter for optimum network IO
- To reduce disk latency, follow storage best practices such as proper Raid configuration, “eager-zeroed disks” and partition alignment

Resource Allocation for Guest OS

The following guideline is based on estimated levels of traffic

MAILBOXES SERVED	CPU Cores	RAM	DISK STORAGE
0-500	Single (mid-range)	1 ~ 2 Gigs	80 Gigs
500-2000	Dual (mid-range)	2 ~ 4 Gigs	120 Gigs
2000-5000	Dual (high-end)	4 Gigs	250 Gigs
5000+	Quad (mid or high)	4 Gigs	250 Gigs+

- The figures above are based on a simple estimate of approximately 100 messages (ham/spam) per day, per mailbox
- Storage size can vary, depending on the time required to preserve quarantined items
- Recommended quarantine storage time is between 5 to 14 days

Where Does modusGate Fit In?

modusGate is a mail filtering SMTP gateway, designed to be physically placed between the Internet and your primary mail server (MTA). When the system is ready to be deployed live, inbound email traffic addressed to your domains is directed to modusGate. From there, clean messages are routed to your primary MTA.

Installation

1. Download your modusGate package and license key from here: <http://www.vircom.com/en/FreeTrial/>
2. Place the executable file on the desktop of your virtual machine (guest OS login)
3. Verify that the following Windows network settings are configured:
 - A DNS Suffix
 - Go to: *System Properties / Computer Name / Change / More*
 - Enter your **Primary DNS Suffix**
 - The network card (NIC) is configured with the following
 - A static IP address (do not use DHCP)
 - Go to: *Network Connections / Local Area Connection / Properties / Internet Protocol (TCP/IP) / Properties*
 - Enter the **IP address, Subnet Mask and Default Gateway IPs**
 - A defined DNS server address
 - Go to: *Network Connections / Local Area Connection / Properties / Internet Protocol (TCP/IP) / Properties / DNS Server settings*
 - Enter your primary DNS server IP, and preferably a secondary
 - Disable Microsoft's *Simple Mail Transfer* agent in the Services panel
 - Go to: **Start / Administrative Tools / Services**
 - Disable *Simple Mail Transfer Protocol*
4. Configure your firewall settings: the following ports must be opened
 - **Egress:** from modusGate to the outside world
 - Port 25 (SMTP): necessary for bounce/outgoing mail traffic
 - Port 80 (HTTP): necessary for virus/spam updates
 - **Ingress:** from the outside world to modusGate
 - Port 25 (SMTP): for inbound mail traffic
 - Port 80 or 443 (HTTP/HTTPS): for quarantine access (optional)
 - **Internal:** for modusGate and the internal infrastructure (if there are multiple firewall layers)
 - Port 25 (SMTP): for communication between modusGate and your MTA
 - Port 389 (AD/LDAP): for communication between modusGate and your Domain Controller (Exchange)
 - Port 3258 (AD Global Catalog): for communication between modusGate and your Domain Controller (Exchange)

5. Install the application
 - Launch the installer and follow the instructions
 - At the end of the process, the installer will prompt you to configure the Connections. You are being asked to define the mail route(s) connecting modusGate to your primary MTA. The following KB articles provide specific configuration details:
 - **Microsoft Exchange:** <http://kb.vircom.com/Kbase/default.asp?id=1378&SID=&Lang=1>
 - **Lotus Domino:** <http://kb.vircom.com/Kbase/default.asp?id=1380&SID=&Lang=1>
 - **Other MTAs:** <http://kb.vircom.com/Kbase/default.asp?id=1556&SID=&Lang=1>
 - The modusGate Administration Guide can be found here (requires PDF reader):
 - **C:\Program Files\Vircom\modusGate\Documentation**
 - Test the connections:
 - <http://kb.vircom.com/Kbase/default.asp?id=1142&SID=&Lang=1>
 - Once you have tested sending an email through the modusGate localhost to a mailbox on your MTA, you should configure modusGate according to these recommended best practices:
 - <http://kb.vircom.com/Kbase/default.asp?id=1553&Lang=1&SID=>
6. Transfer mail flow to modusGate
 - Change the DNS Server's MX record to point to the modusGate server: this will route inbound mail from the Internet to the modusGate server.
 - This configuration is **mandatory**
 - Configure your MTA to use modusGate as a SMTP relay if you want to filter outbound email.
 - This configuration is **optional**

Support

Should you need help with your deployment, or have questions about configuring and testing your system prior to making it live, feel free to contact our Support Department.

Contact:

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Hours:

North, Central and South America
7:30AM to 6:00PM EST, Monday to Friday

Europe, Africa and Asia
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