

Microsoft Exchange 2003 – Configuring the Intelligent Message Filter (IMF)

Written by Marc Grote - <mailto:grotem@it-training-grote.de>

Abstract

In this article I will give you a step by step solution to setup the Intelligent Message Filter which you can download for free from the Microsoft Exchange Website.

Reference: Microsoft Exchange Intelligent Message Filter Deployment Guide.

Overview

Exchange 2003 offers some enhanced level of Antispam functionality, but that's not enough. In the past month Microsoft developed a new weapon against Spam, sometimes called UCE (Unsolicited Commercial E-mail). This new weapon is the IMF. IMF is based on Microsoft SmartScreen Technology from Microsoft Research.

IMF (Intelligent Message Filter) is an advanced, Exchange 2003 based filtering technology that "intelligently" determines whether e-mail is Junk-Mail or legitimate. IMF fully integrates with Microsoft Exchange Server 2003 to provide additional spam filtering.

The IMF Filter provides advanced server-side message filtering to fight against UCE. Working with Outlook 2003 and Exchange 2003 it helps to filter messages. When used with Outlook, it reduces the volume of UCE that e-mail users receive. IMF requires Exchange Server 2003 and works in conjunction with existing Antispam Features in Exchange 2003, such as:

- ? Connection Filtering
- ? Sender Filtering
- ? Recipient Filtering.

IMF includes:

- ? Heuristics-based analysis of messages determines whether they are legitimate or UCE.
- ? Server-side filtering with integrated Exchange Server administration decreases administrative time and cost as well as user productivity loss.
- ? Support for per-message SCL allows thresholds to be set both at the server gateway running Intelligent Message Filter and at the user mailbox using Outlook

Installation

First we have to download IMF (9.3 MB size) from the following Microsoft Website:
<http://www.microsoft.com/downloads/details.aspx?FamilyId=B1218D8C-E8B3-48FB-9208-6F75707870C2&displaylang=en>

Start the installation process by opening the MSI Package EXCHANGEIMF.MSI.

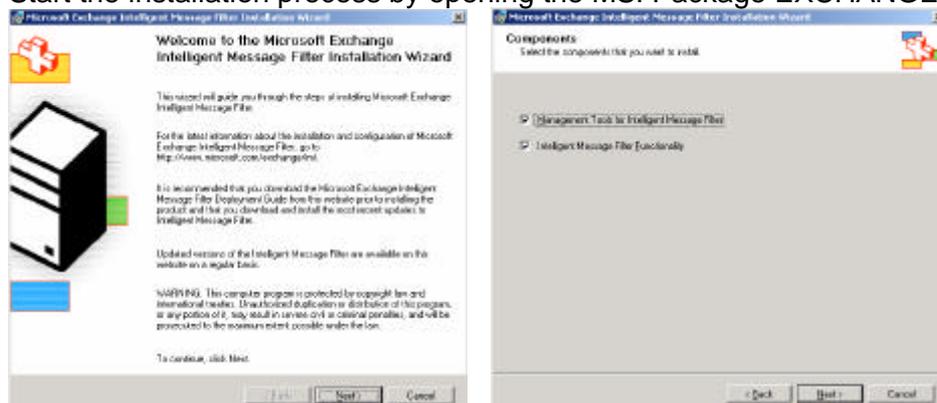


Figure 1: IMF installation Dialog
How IMF protects Exchange

Figure 2: Select the components to install

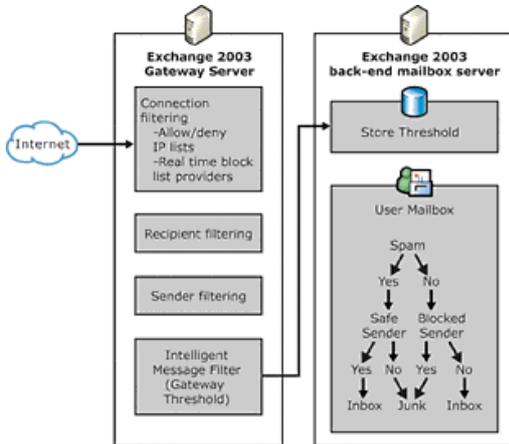


Figure 3: E-Mail Workflow with IMF

As you can see in this screenshot IMF is a two step solution. The first IMF part resides at the Gateway level where all other AntiSpam and Connection Filtering exist. The second part of IMF exists at the Exchange 2003 store level.

After IMF installation you must start Exchange System Manager and navigate to Global settings – Message Delivery.

The Message Delivery Properties are now enhanced with an “Intelligent Message Filter” section.

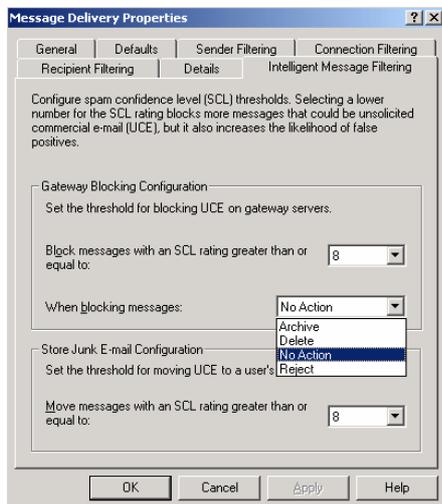


Figure 4: IMF Message Delivery Properties

The Dialog box is simple. First you have to select the SCL Rating Level for GATEWAY Blocking. Messages with the selected SCL Rating and higher will be blocked. When blocking messages you can choose the following actions:

- ? Archive – Junk E-mails will be archived in a folder named UCEARCHIVE under the root path of the virtual SMTP Server
- ? Delete – Junk E-mails will be deleted without notification
- ? No Action – IMF is not active at the gateway but only at the Store Level

- ? Reject – Junk E-mails will be rejected. The sending SMTP Server is then responsible for delivering the NDR to the sender of the message.

Next you have to specify the SCL Rating for Junk E-Mail configuration at STORE level. All messages with this SCL Rating or higher will be moved to the Junk E-mail folder in Outlook 2003 / OWA 2003.

Spam Confidence Level

The spam confidence level (SCL) is the normalized value assigned to a message that indicates, based on the characteristics of a message (such as the content, message header, and so forth), the likelihood that the message is spam.

SCL Values

There are eleven values available to categorize spam, as outlined in the following table.

SCL Value	Spam Categorization
-1	Reserved by Microsoft Exchange Server 2003 for messages submitted internally. A value of -1 should not be overwritten because it is this value that is used to eliminate false positives for internally-submitted e-mail
0	Assigned to messages that are not spam
1 to 9	Extremely low likelihood that the message is spam. ...ranging to... Extremely high likelihood that the message is spam

This array allows you to choose how aggressive or conservative you want your spam filtering to be by selecting a threshold value above which you consider a message to be spam. If you want to aggressively filter spam, you can choose a fairly low threshold, such as an SCL value of 5, which would catch a higher number of spam messages. However, a higher number of false positives would also be caught. To filter spam more conservatively, you can choose a higher threshold, such as an SCL value of 8, which would catch fewer spam messages, with a lower number of false positives being caught.

The Spam confidence Level is only used by Microsoft Outlook 2003 and Microsoft Exchange 2003.

Activating IMF

Like the Sender Filtering you must activate IMF per Virtual SMTP Server. To that start Exchange System Manager expands your Server, navigate to Protocols, select the SMTP Protocol and activate IMF by selecting the Virtual SMTP Server.

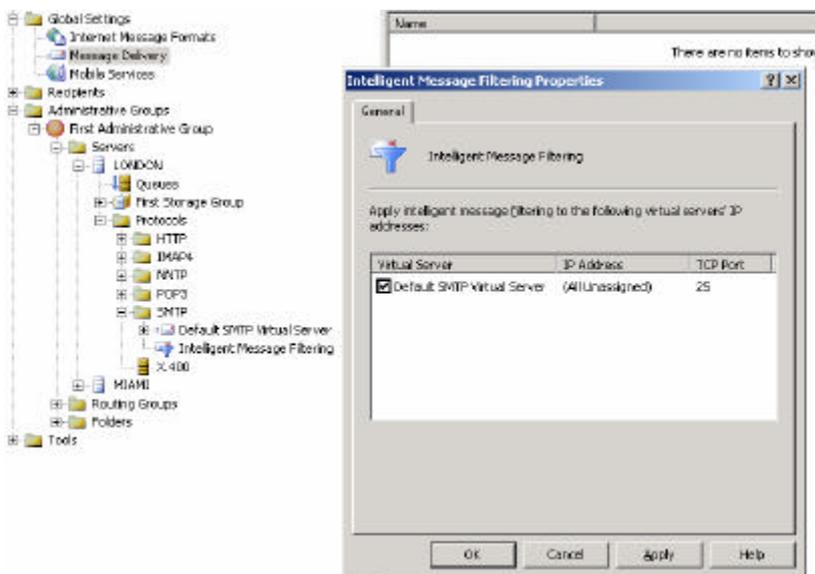


Figure 5: Activate IMF for the Virtual SMTP Server

Integration with Outlook 2003

Like IMF, Outlook 2003 uses SmartScreen technology to determine whether to treat a message as UCE (SPAM) or legitimate e-mail. If IMF or Outlook determines a message to be UCE, the message is delivered to the UCE folder so that no user interaction is required. Users can set their filter settings to No Protection, Low, or High or use a highly restricted mode that permits only people on their contact lists to send them e-mail.

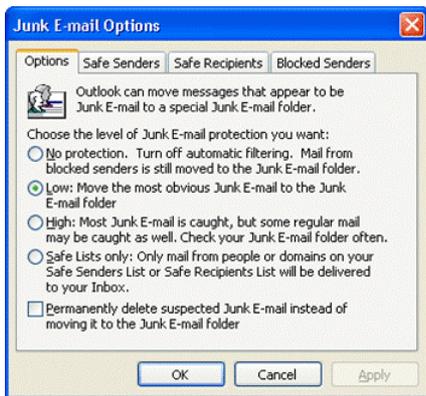


Figure 6: Junk E-mail options in Outlook 2003

Conclusion

IMF can reduce the amount of Junk E-mail by using advanced, Exchange based message filtering to determine junk and legitimate e-mails. In Combination with Outlook 2003 and Exchange Server 2003, IMF reduces UCE content in your Exchange Inboxes.

Related Links

Download Link for IMF

<http://www.microsoft.com/exchange/downloads/2003/imf/default.asp>

Other information

<http://www.microsoft.com/downloads/details.aspx?FamilyId=B1218D8C-E8B3-48FB-9208-6F75707870C2&displaylang=en>

<http://www.microsoft.com/exchange/imf>