

## Implementing Exchange 2003 Message Journaling

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### Abstract

In this article I will show you how to implement Exchange 2003 Journaling for e-mails. Exchange 2003 provides a native Journaling feature which allows you to archive all e-incoming and outgoing e-mails for a specific mailbox store.

Beginning with Exchange 2003 SP1 you can download EXEJCFG.EXE from the Exchange 2003 download site. EXEJCFG enhances the current Exchange archiving features to capture recipients on distribution lists, BCC recipients and other message details.

### Why Journaling

Message Journaling can become necessary because of political reasons or new regulations. Many organizations in the healthcare and insurance industry or financial services must record the communication between their customers and their employees.

### What to Journal

There are three different types of journaling that you can enable in Exchange Server 2003.

#### ? Message-only journaling

Message-only journaling captures all messages from users on a specific mailbox database and sends the message copy to a specified journaling mailbox.

#### ? BCC journaling

BCC journaling is message-only journaling a capture of BCC recipients. When BCC journaling is enabled, Exchange Server captures all recipients (TO / CC / BCC).

**Note:** BCC journaling doesn't work if the recipient list contains hidden distribution lists, query-based distribution lists, or distribution lists that have another expansion server.

#### ? Envelope journaling

Envelope journaling is different from message-only journaling and BCC journaling in that way it allows you to archive P1 message headers (envelope headers). This includes information about the recipients, including BCC recipients and recipients from distribution groups.

### How Exchange Envelope Journaling works

Message-only journaling sends a copy of a message to the journaling mailbox every time a user in a journal-enabled mailbox database sends or receives a message

Envelope journaling provides a much more useful service because it records data about all recipients that a message is delivered to.

## **Performance impacts**

Journaling will have an impact on the performance of your Exchange Servers and network infrastructure. Every e-mail delivered to your Exchange Mailbox Store will be copied and delivered to the Journaling account. This consumes much more disk space on your Exchange Servers – resulting in more CPU time and more disk input/output (I/O). Enhanced Message Journaling consumes also more network bandwidth.

## **Journaling Impact on User Mailbox Servers**

When Message Journaling is enabled in a Mailbox Store a user with a mailbox on that mailbox database who sends a message, the server creates two messages. One message for the recipients and one for the journal recipient.

## **How to estimate the performance impact?**

When all other conditions of the Exchange Server remain unchanged, you can expect approximately a performance degradation from 15 to 35 percent

## **Installation**

First we need to download the enhanced Journaling download tool [here](#). The download size is only a few hundred KB. To use this tool, simply extract the content of EXEJCFG.EXE with a doubleclick. The package contains three files:

- ? Eula.txt
- ? Envelope Journaling.doc
- ? Exejcfg.exe

## **Restriction**

If you implement Exchange 200x's message journaling feature, you'll know that it only works on a per-mailbox store basis. Read more about how to implement Journaling on a per mailbox basis [here](#).

## **What's the difference between a Archive Sink and Journaling**

A Archive Sink allows only the capturing of e-mails that flow through a specific SMTP virtual Server. Journaling captures every e-mail that is sent or received by Exchange users in a specific mailbox store.

## Standard Message only Journaling

First, create a user for Message Journaling

The screenshot shows the 'Journal Properties' dialog box with the following fields and values:

Member Of	Dial-in	Environment	Sessions	Remote control	
Terminal Services Profile		COM+		Exchange General	
E-mail Addresses		Exchange Features		Exchange Advanced	
General	Address	Account	Profile	Telephones	Organization

**Journal**

First name:  Initials:

Last name:

Display name:

Description:

Office:

Telephone number:

E-mail:

Web page:

Buttons: OK, Cancel, Apply, Help

Figure 1: Create the Journaling Exchange Mailbox

Now you must enable message journaling for a specific Mailbox Store. Start the Exchange System Manager, right click the specific Mailbox Store and enable message Archiving.

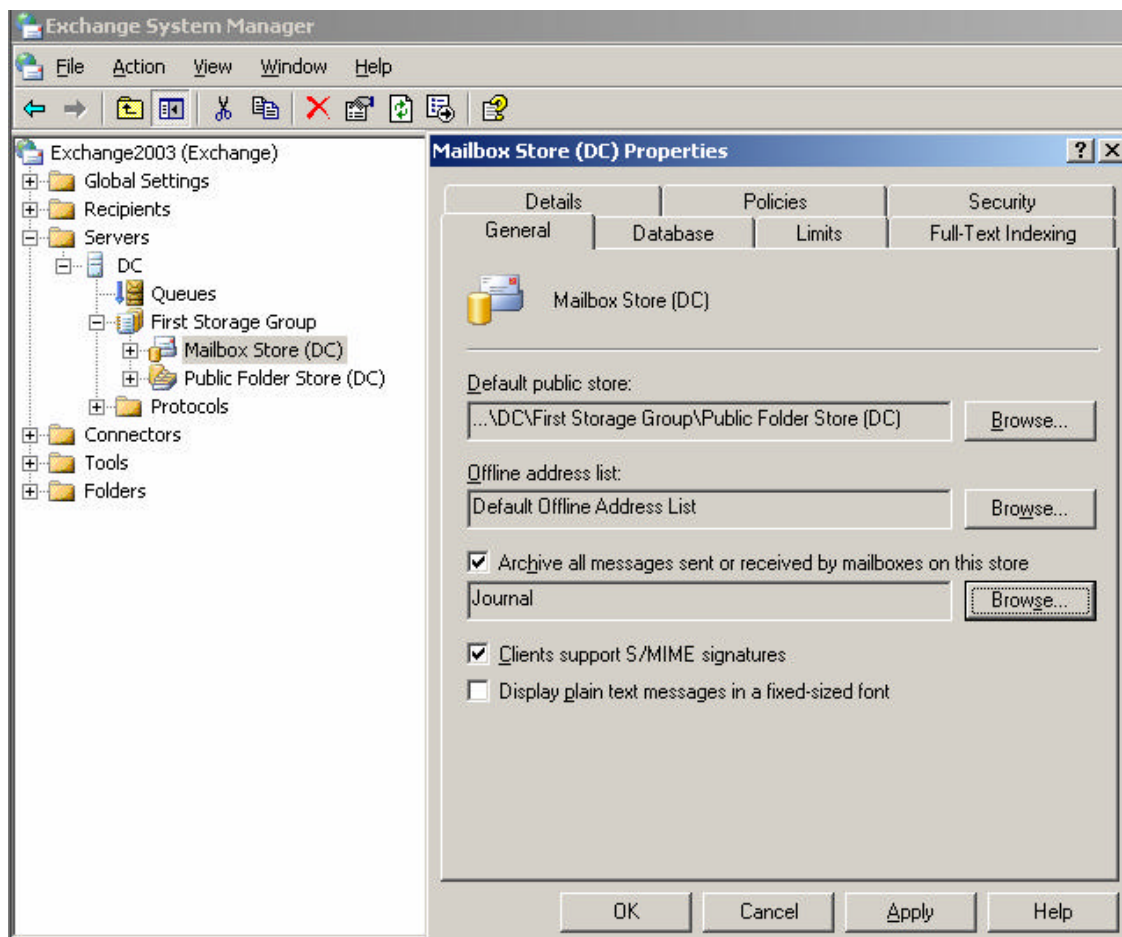


Figure 2: Enable Standard Message Archiving

## Enhanced Message Journaling

To enable enhanced Message Journaling enter EXEJCFG –e from a command prompt.

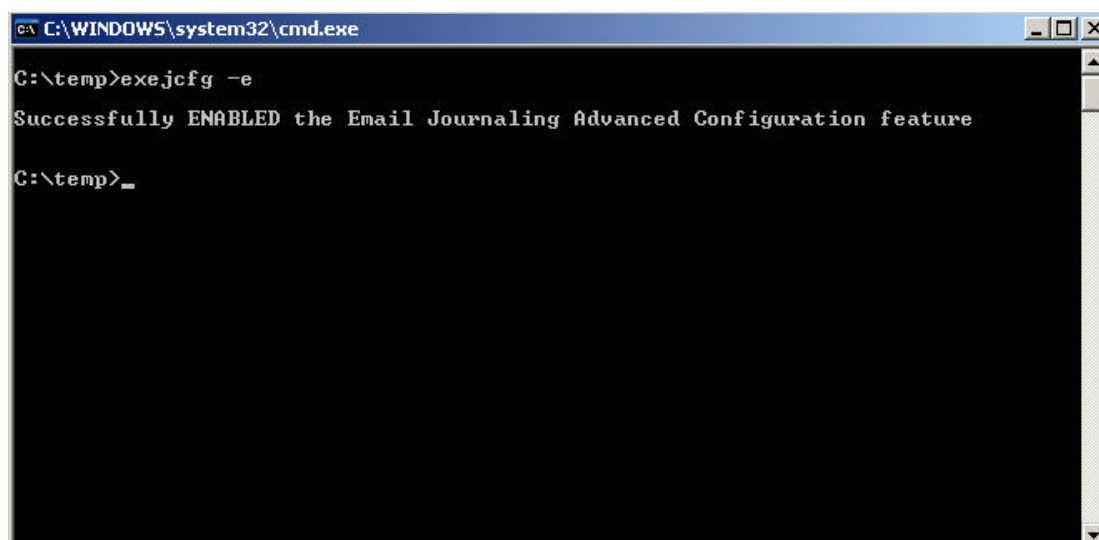


Figure 3: Enable enhanced Message Journaling

### EXEJCFG Parameters

Parameter	Description
-e	Enables envelope journaling.
-d	Disables envelope journaling
-l	Lists the envelope journaling setting—whether envelope journaling is enabled or disabled.
/?	Provides the list of options and a short help. If you run the command with no options, it defaults to this option.

### Display of archived messages

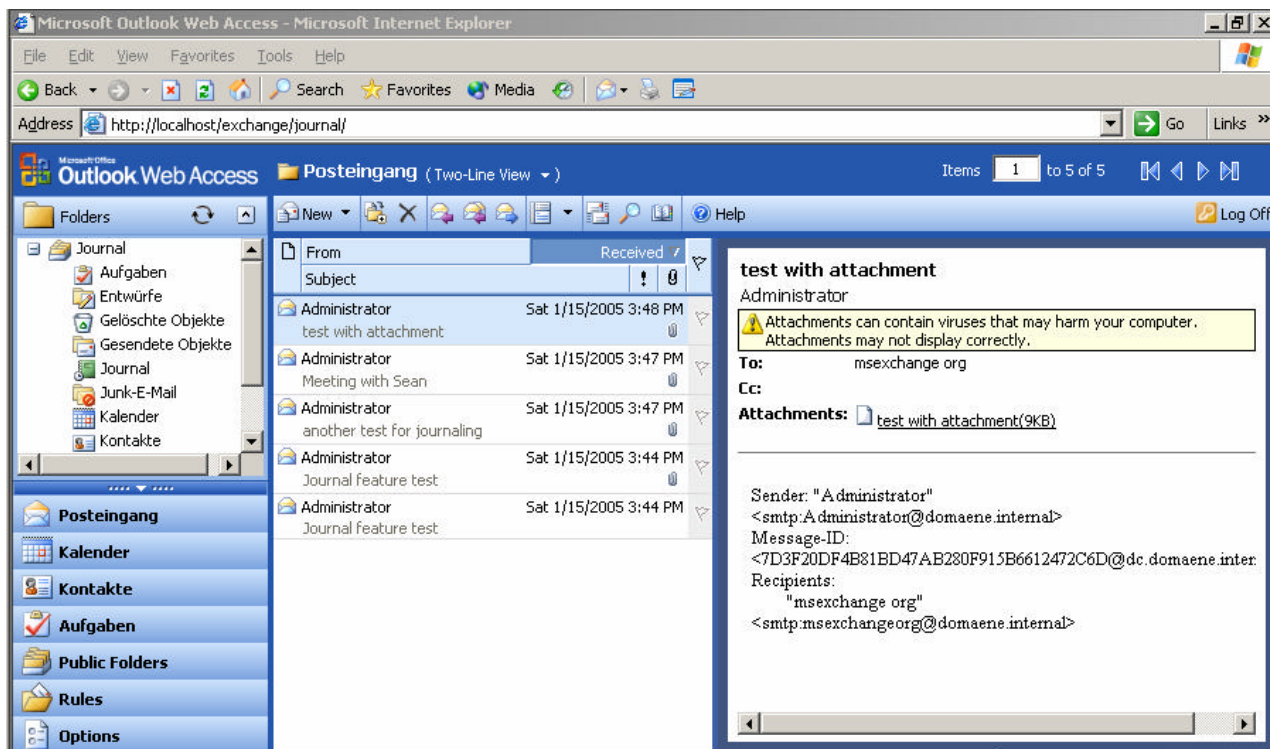


Figure 4: Content of the Journaling mailbox

### Configuring Mailbox Manager to Clean the Journal Recipient Mailbox

It is recommended to clean up the Journal mailbox in regular intervals after you have moved the archived messages to another location (Third party tool or .PST file). To do this you can use the Mailbox Manager. The Mailbox Manager can permanently delete the messages in the Journal Mailbox after a specified time period.

It is recommended that you verify through testing and monitoring how long you want messages to remain in the Journal Mailbox. This depends on legal requirements and the timeframe that you want to have access to archived messages.

## How to activate the Mailbox Manager

Start the Exchange System Manager and navigate to the **Recipient Policies** container and create a new **Mailbox Manager Settings** policy.

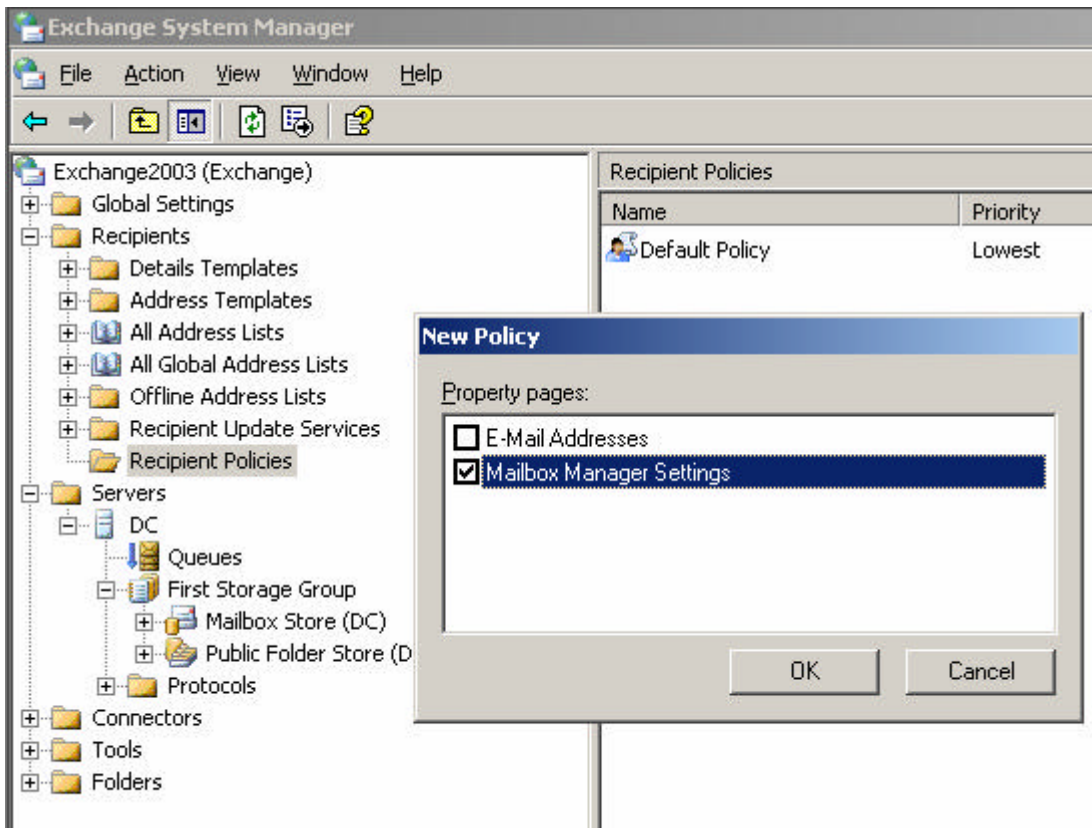


Figure 5: Create a Mailbox Manager Policy

It is important to limit the Filter rule to the Journaling account.

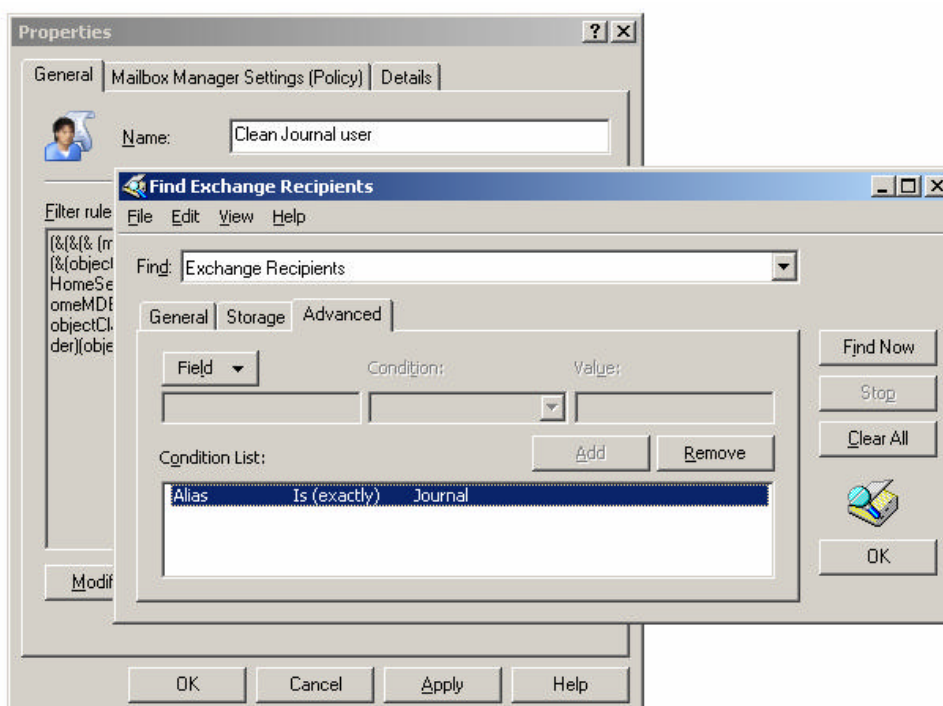


Figure 6: Limit the filter rule to the Journaling account

Now you can specify the action when processing a mailbox, for which folder and content age or size the cleanup process should start.

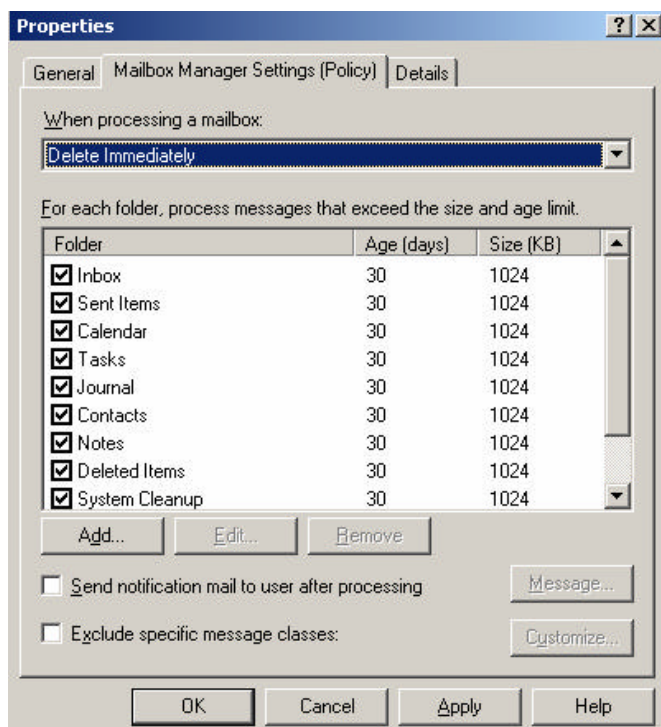


Figure 7: What to do when processing a mailbox

## Conclusion

You should enable Message Journaling only if it is absolut necessary because it can consume a lot of processor time, much more space on your hard disks and some network overhead.

## Related Links

Exchange 2003 Journaling Download tool

<http://www.microsoft.com/downloads/details.aspx?familyid=e7f73f10-7933-40f3-b07e-ebf38df3400d&displaylang=en>

Information about Exchange 2003 Journaling

<http://www.microsoft.com/technet/prodtechnol/exchange/2003/library/journaling.msp>

Exchange 2003 Journaling Whitepaper Download

<http://download.microsoft.com/download/0/7/3/0730fa29-1a77-43a0-87de-2f97e059fec8/Journaling%20with%20Exchange%20Server%202003.exe>

Introduction to Journaling with Exchange Server 2003

<http://www.microsoft.com/technet/prodtechnol/exchange/guides/E2k3Journal/0526b555-4da6-4ab0-93e5-1e6d20962c89.msp>

How to Enable the "Message Journaling" Function for an Exchange Server Mailbox Store

<http://support.microsoft.com/default.aspx?scid=kb;en-us;261173&Product=exch2k>

What's the difference between Archive Sink and Journaling

<http://blogs.msdn.com/exchange/archive/0001/01/01/174188.aspx>

Troubleshooting message journaling in Exchange Server 2003 and in Exchange 2000 Server

<http://support.microsoft.com/default.aspx?scid=kb;en-us;843105>

Blind carbon-copy information does not appear in journaled messages in Exchange 2000 Server

<http://support.microsoft.com/default.aspx?scid=kb;en-us;827716>