

A simple, cost effective email archiving solution that adds massive value with little overhead

Advantages

- No extra hardware or software required
- Extremely cost effective
- Good, basic protection without the frills

Limitations

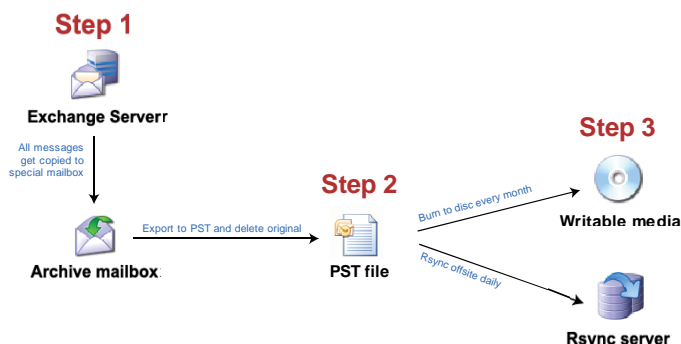
- Searching is done through Outlook – single user, and slower than a SQL based solution
- Not 100% foolproof against tampering

Note: These instructions have been written for and tested against SBS 2003 and SBS 2008

Overview

There are three steps involved in this email archiving solution:

1. Enable Journaling to copy each message to a special mailbox
2. Export the contents of that mailbox to PST file
3. Copy the PST file offsite – e.g. Rsync, Robocopy, burn to DVD



The end result: All emails sent and received in Exchange Server are exported to PST. This file can then be burned to DVD for permanent archiving.

Step 1: Enable Exchange Journaling

Journaling is the process of recording all communications by copying messages to a specially designated mailbox.

<http://www.microsoft.com/downloads/details.aspx?familyid=D357E733-0E22-477C-B884-0C38FBB51533&displaylang=en> for more info

Exchange 2003 has 3 Levels of Journaling:

- Message Journaling – messages only
- Bcc Journaling – including BCC recipients
- **Envelope Journaling** – everything – this is what we want to be compliant with most regulatory acts

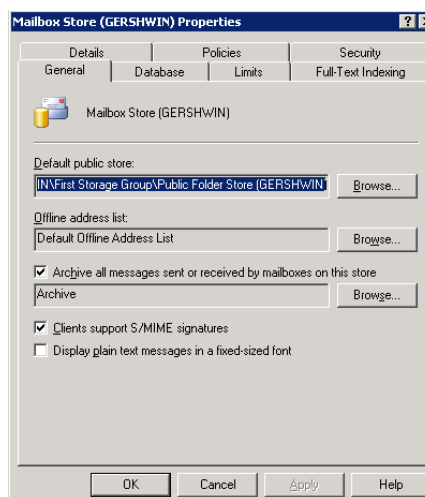
Exchange 2007 only has Envelope Journaling.

To enable Envelope Journaling:

Exchange Server 2003:

- Create a new user, and call it “Archive”
- Run Exchange System Manager > Administrative Groups > First Administrative Group > Servers > SERVER_NAME > First Storage Group > Mailbox Store – right click and select “Properties”

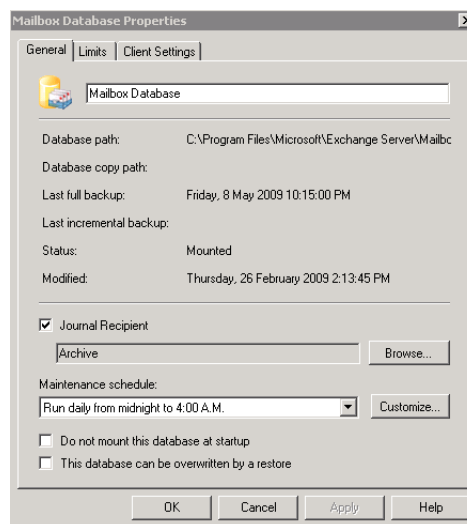
- Check the “Archive all messages sent or received by mailboxes on this store” and select the “Archive” user. Message level Journaling is now activated.



- To turn on Envelope Journaling, do this: Download the Exchange Journaling Advanced Configuration tool from <http://go.microsoft.com/fwlink/?LinkId=70627> and run it to uncompress it, and then run “exejcfg.exe –e”

Exchange Server 2007:

- Create a new user and call it “Archive”
- Run “Exchange Management Console”, and navigate to Microsoft Exchange > Server Configuration > Mailbox > First Storage Group > Mailbox Database, and right click and select “Properties”
- Check the “Journal Recipient” checkbox and click “Browse” and select the Archive user
- Reboot – the setting doesn’t seem to take effect until a reboot.



Verifying that Journaling is working – log in via Outlook Web Access as the Archive user and make sure messages are copied into the inbox.

- SBS 2003: <https://localhost/exchange>
- SBS 2008: <https://localhost/owa>

Step 2: Export messages to PST file

Option 1: use free tools provided by Microsoft

Exchange 2003: Exmerge

- Free download from MS website
- Easiest scenario - install on the Exchange Server itself
- Set mailbox rights: locate the Archive user in the active directory, right click Properties > Exchange Advanced > Mailbox Rights. Click Advanced > Add, and add "Full mailbox access" for the Administrator user.
- Create a C:\Archive directory and create a file called exmerge.ini file:

```
[EXMERGE]
MergeAction=0
DataImportMethod=3
SourceServerName=DEV-SBS2003
LogFileNames=c:\archive\exmerge.log
FileContainingListOfMailboxes=c:\archive\mailbox.txt
DataDirectoryName=C:\archive
```

- Create a file called Mailbox.txt in the C:\Archive directory (replacing DOMAIN with your domain name):

```
/O=DOMAIN/OU=FIRST ADMINISTRATIVE
GROUP/CN=RECIPIENTS/CN=ARCHIVE
```

- Run Exmerge with the following command:

```
"c:\Program Files\Exchsrvr\bin\ExMerge.exe" -b
-f c:\backups\archive.ini
```

Exchange 2007: export-mailbox PowerShell cmdlet

- Must be run from a 32 bit machine, with Outlook and Exchange Management Tools for Exchange 2007 installed. Use these PowerShell cmdlets.
- Set up permissions for your administrator user:

```
Get-Mailbox -Identity "Display.Name" | Add-ADPermission -User "Administrator" -ExtendedRights Receive-As
```

- Run the Export-Mailbox command as the administrator user:

```
Export-Mailbox -Identity archive -PSTFolderPath
G:\PSTArchive -Confirm:$false
```

Helpful suggestions:

- Watch for the 2 GB file limit with Exmerge.
- Separate out the PSTs by time-grouping. eg. May 2009, June 2009.

Option 2: use the BackupAssist Exchange Mailbox Add-on

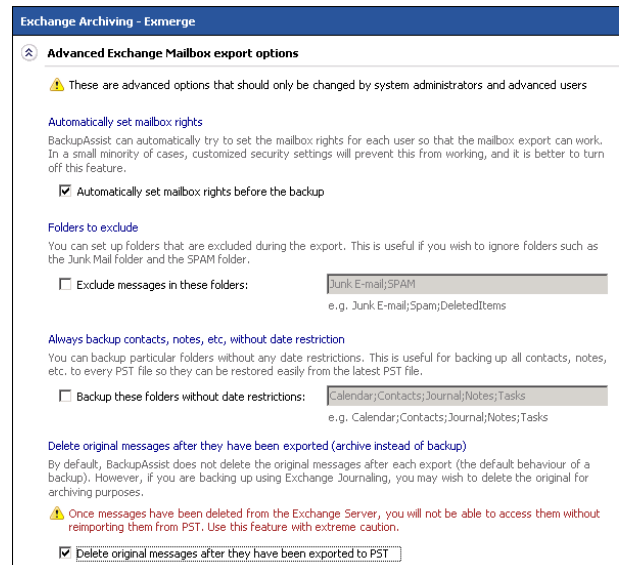
Using the BackupAssist Exchange Mailbox Add-on greatly simplifies the task of exporting the Archive mailbox to PST:

- ✓ Automatic granting of mailbox rights
- ✓ Automatic separation of PST files by time period

- ✓ Overcomes 2GB file limit if Outlook is installed, but does not require Outlook (unlike the PowerShell solution)
- ✓ Will run on both 32-bit and 64-bit machines
- ✓ Provides monitoring and email reports

Follow these steps to set up your export job:

- Set up an Exchange Mailbox job within BackupAssist. by following the New Job Wizard
- For grouping method, choose either Monthly or Quarterly grouping, as appropriate for your organization
- Choose to backup the "Archive" mailbox only
- After the setup is complete, go to the Exmerge options tab, and check the "Delete original messages" checkbox, as shown below.



Comparison of the two methods

Feature	Manual	BackupAssist
Automatic time-grouping of PSTs	✗	✓
GUI-based setup	✗	✓
Automatic scheduling	✗	✓
Notified of errors	✗	✓
Emailed report	✗	✓
Runs on the Exchange Server	Exchange 2003 only	✓
Cost	Free	US \$129, AUS \$195 inc GST

Step 3: Burn or copy the PST file to a different location

Step 3 is to periodically copy the PST file, using your favourite method of replication. Possibilities include:

- Burning the PST file to disc for permanent archiving
- Using Robocopy or BackupAssist File Replication to copy the file to a secondary location
- Backing up the PST as part of your tape backup job
- Using Rsync to copy it to a remote Rsync server via the Internet (bandwidth efficient)