

GFI MailArchiver[™]

Archiving for productivity, management and compliance

SmartGuide

This SmartGuide is an important tool to enhance your success with GFI MailArchiver®.

Welcome to GFI MailArchiver (“MailArchiver”): The single-source solution for your email archiving and email management problems on your Microsoft® Exchange server.

Introduction

This SmartGuide is an important tool to enhance your success with the product. This SmartGuide includes the following:

1. [GFI MailArchiver product overview](#)
2. [Why customers purchase GFI MailArchiver](#)
3. [Five major points to consider before deploying GFI MailArchiver](#)

GFI MailArchiver is easy to install and get running; however, there are aspects that need to be understood before installing it. From our experience, if these items are not addressed, there could be situations where configuration issues could impact the performance of the product and, therefore, your success with it.

With this guide and a little planning ahead of time, you will be able to deploy an efficient and easy-to-maintain environment. Please take the time to review this document before installing the product.

For additional detailed documentation you can refer to GFI®’s Knowledge Base, SkyNet, (kb.gfi.com) and the GFI MailArchiver documentation located [here](#).

If, after reading the SmartGuide, you have questions about any of the information in this document, please [contact our support organization](#) or [create a support request](#).

GFI MailArchiver product overview

GFI MailArchiver is used to maintain a copy of corporate email correspondence, for management and compliance purposes, and reduce the company’s need for PST files.

Let’s start with a review of what GFI MailArchiver does. Simply stated:

1. When someone sends an email to an email user, the email is put into their Microsoft Exchange (Exchange) mailbox and, a copy is also replicated in Microsoft’s Exchange journaling mailbox.
2. GFI MailArchiver retrieves the email from the Exchange journaling mailbox and archives it into an easily accessible and searchable database. The email archive is stored in a database (or a combination of a database and files). The email archive may be located on the Exchange Server or on a separate server.
3. The email users can then simply access their archived copy of the email in one of the following ways:
 - a. Directly in Microsoft Outlook® in the user’s folder structure “[GFI MailArchiver Mailbox](#)”. This is accomplished using the [GFI MailArchiver Outlook Connector Plug-in](#) or
 - b. Using the GFI MailArchiver web interface or
 - c. Using IMAP from any compatible IMAP client (Android™, iOS, Microsoft® Outlook®, Thunderbird®, Apple Mail, Outlook for Mac®, Windows Live® Mail)

GFI MailArchiver then connects to the Exchange journaling mailbox to retrieve the emails to be archived. This is discussed in greater detail in the **GFI MailArchiver Administration and Configuration Manual**, Chapter 5.2 “Managing the Mail Servers to Archive”.

Why customers purchase GFI MailArchiver

Based on our experience, below are the top five reasons GFI customers purchase GFI MailArchiver:

1. To significantly **reduce the processing and availability demands on the Exchange Server**
2. To **meet the growing number of regulations on compliance, eDiscovery and other regulations**. For example, legal departments often ask: "Search this user, for this date range, on this subject."
3. As **an easily accessible self-service recovery of emails** for email users
4. As **a centralized tool for monitoring the email activity** of email users, and the content of emails sent
5. To easily **manage and reduce their dependency on** distributed and unmanageable **PST files**.

Before deploying GFI MailArchiver

There are five major aspects of GFI MailArchiver to consider before deployment. It is important that you understand each of them. If, after reading the section below, you still have any questions or want to discuss any of the points mentioned below, please [contact us](#).

1. **Licensing GFI MailArchiver: How to determine license count**
2. **System installation requirements**
3. **Database recommendations**
 - a. What database to use? If using Microsoft SQL (MS SQL), which version do we recommend?
 - b. What are the recommended configuration setup and hardware specifications?
4. **Managing and maintaining databases through archive store management**
5. **Managing search indexes**

1. Licensing GFI MailArchiver: How to determine licence count

For licensing purposes, GFI MailArchiver counts all users in the Active Directory® (AD) domain that have email addresses. The number of Active Directory mailboxes is the number of GFI MailArchiver licenses that is required.

There are times, however, where you may not want to archive every person's email. In this case you can choose to exclude certain users from email archiving. There are two possible methods through which a user or group can be excluded from archiving – an inclusion list or an exclusion list.

1. Inclusion list – only the Active Directory Users or Groups that you list will be archived
2. Exclusion list – all users will be archived **except** the Active Directory Users and Groups you specify.

Note: In the user lists, you will see three possible methods of entry - User, Group, and Email. Using either User or Group for these exclusions will reduce your licensed user count. If you choose to use email addresses in the exclusions, you will not reduce your user count. Therefore, for licensing purposes, it is always recommended to select Users or Groups in your exclusions.

You can read more on the exclusion methods in the "**Mailbox archive restrictions**" section of the manual.

2. System installation requirements

GFI MailArchiver has a few software prerequisites. These must be installed prior to installing GFI MailArchiver. The most important of these requirements are listed below and the full set can be found [here](#).

1. Windows® 2003 SP1/2008/2008 R2 or later
2. Windows SBS 2003 or later
3. Microsoft .NET Framework 4/0
4. ASP.Net 4.0
5. Internet Information Services (ISS) – SMTP and world wide web services
6. Microsoft Internet Explorer® 8 or later/Mozilla® Firefox®, Google Chrome™, Safari®
7. Microsoft Exchange Server MAPI Client and Collaboration Data Objects (CDO) 1.2.1 must be installed in the following cases (unless Microsoft Outlook 32bit is installed):

Microsoft Exchange version	GFI MailArchiver installed on the Exchange machine	GFI MailArchiver installed on a separate machine
Exchange 2000/2003	Do not install MAPI CDO	Install MAPI CDO
Exchange 2007/2010	Install MAPI CDO	Install MAPI CDO

8. Exchange journaling must be enabled
9. GFI MailArchiver will require a database to store emails, if a version of MS SQL is best for your organization then you will want to have this installed prior to installing the product.

3. Database recommendations

Most installations of GFI MailArchiver use MS SQL database to store their archived emails. As MS SQL comes in different versions and editions, it is critical that you are aware of them and plan accordingly before you implement GFI MailArchiver. Plan upfront to avoid issues (e.g., performance) caused because you needed a different version or edition of MS SQL server database. Our customers have experienced this enough times, so we believe it is important to review this with you before you start your installation.

There are two editions of MS SQL that you should be aware of; MS SQL Express and MS SQL Server.

1. SQL Express is the free version of the product. *SQL Express version 2005 or prior has a limitation of 4GB per database. SQL Express version 2008 R2 has a limitation of 10GB per database.* It is therefore a critical variable when planning your implementation of GFI MailArchiver. The number of emails you will be archiving is important to think about. If the size of the database is or will grow to be larger than the SQL Express limitations listed above, you should consider the full version of MS SQL Server database.
2. If your archive needs are greater than what SQL Express allows (see the SQL Express limitations listed above), then MS SQL Server is most suitable. GFI recommends this version as this is the one that most of our GFI MailArchiver installations use.
3. Microsoft SQL Server® 2012 has two licensing models:
 - » Per core: Per core pricing model requires the user to license each physical core. The benefit of this model would be that you would not worry about the number of users and Microsoft does not license a multi-core processor as multiple CPUs.
 - » Server + per user CAL (client access license): Using this licensing model, you would purchase one server license and a SQL Server 2012 CAL for each user or device accessing the server.

If the MS SQL Server is used for other applications, then these connections must be taken into consideration.

Below are some links to MS SQL licensing information pages. [Microsoft SQL Server 2012 Licensing](#)

As always, you may want to consult with Microsoft or your Microsoft partner for advice.

After understanding the various MS SQL Server databases available, customers will often ask for any suggested guidelines as to which database to choose. They ask us questions like: if I have 23 email boxes and archive about 2,000 emails per day, can you make any recommendations?

GFI MailArchiver is an archiving product and the minimum requirements are only for GFI MailArchiver installation space requirements, and not for the storage space to hold archived emails, so we have also provided some storage guidelines. Table 2 "**GFI MailArchiver recommended hardware specifications**"^{**}, should help you when deciding how much storage space you will need for your archived emails.

Recommended configuration

GFI MailArchiver can be configured to run in various hardware set-ups and combinations. It is important that different physical disks are used to host different entities. For example, it is suggested that RAID5 is used for both backend databases and GFI MailArchiver indexes. Ideally both will be on separate controllers to avoid any controller bottleneck. MS SQL Server or MS SQL Express can be used, however, keep in mind that MS SQL Express has the following three limitations:

1. Database size can be up to 4GB for SQL Express version 2005 or prior. SQL Express version 2008 R2 has a limitation of 10GB per database.
2. It uses 1 CPU only.
3. It uses a maximum of 1GB RAM.

Therefore, it is recommended that when MS SQL Express is used, it is used in conjunction with NTFS. That is, the Archive Store is built on the model of MS SQL + NTFS.

Table 2: GFI MailArchiver recommended specifications

Table 2 outlines the minimum requirements for GFI MailArchiver. If the server is to host other services, such as a Domain Controller, Exchange, and MS SQL, extra resources must be added.

These are the minimum requirements for GFI MailArchiver. The requirements for other services should be over and above the specifications below.

SMALL (<50 mailboxes or 2,500 emails/day)				
Deployment	Exchange 2003	Exchange 2007 SP1/2010	Database*	Hardware*
Installed on Exchange	ExOLEdb	Exchange Web Services (EWS)	SQL Express 2012 and NTFS: Database file on Disk 1, Binary files on Disk 1, Search Indexes on Disk 2	Intel Xeon 2.33GHz-64-bit 4GB RAM - 3 Physical disks
Installed off Exchange	IMAP	EWS	SQL Express 2012 and NTFS: Database file on Disk 1, Binary files on Disk 1, Search Indexes on Disk 2	Intel Xeon 2.33GHz-64-bit 4GB RAM - 3 Physical disks
MEDIUM (50 – 100 mailboxes or 6,000 emails/day)				
Deployment	Exchange 2003	Exchange 2007 SP1/2010	Database*	Hardware*
Installed on Exchange	ExOLEdb	EWS	SQL Express 2012 and NTFS: Database file on Disk 1, Binary files on Disk 1, Search Indexes on Disk 2	Intel Xeon 3.2GHz-64-bit (2 processor cores) 4GB RAM – 3 Physical disks
Installed off Exchange	IMAP	EWS	SQL Express 2012 and NTFS: Database file on Disk 1, Binary files on Disk 2, Search Indexes on Disk 3	Intel Xeon 3.2GHz -64-bit (2 processor cores) 4GB RAM – 3 Physical disks

LARGE (101 – 500 mailboxes or 8,000 emails/day)				
Deployment	Exchange 2003	Exchange 2007 SP1/2010	Database*	Hardware*
Installed on Exchange	ExOLEdb	EWS	SQL Express 2012 and NTFS; OR SQL Server Full Version: Database file on Disk 1, Binary files on Disk 2, Search Indexes on Disk 3	Intel Xeon 3.2GHz- 64-bit (2 processor cores) 4GB RAM – 3 Physical disks
Installed off Exchange	IMAP	EWS	SQL Express 2012 and NTFS; OR SQL Server Full Version: Database file on Disk 1, Binary files on Disk 2, Search Indexes on Disk 3	Intel Xeon 3.2GHz-64-bit (2 processor cores) 4GB RAM – 3 Physical disks

VERY LARGE (500+ mailboxes or 8,000+ emails/day)***				
Deployment	Exchange 2003	Exchange 2007 SP1/2010	Database*	Hardware*
Installed on Exchange	ExOLEdb	EWS	SQL and NTFS (Full Version): Database file on Disk 1, Binary files on Disk 2, Search Indexes on Disk 3	Intel Xeon 3.2GHz-64-bit (2 processor cores) 8GB RAM – 3 Physical disks
Installed off Exchange	IMAP	EWS	SQL and NTFS (Full Version): Database file on Disk 1, Binary files on Disk 2, Search Indexes on Disk 3	Intel Xeon 3.2GHz-64-bit (2 processor cores) 8GB RAM – 3 Physical disks

**Suggested specifications are for GFI MailArchiver only; if the server hosts other services, such as Domain Controller, Exchange, and MS SQL, extra resources will need to be added.*

NOTE: GFI does not license or represent Microsoft or any of its products. We also do not know all the details of your internal systems, applications and data. The charts in this SmartGuide are here to provide some suggestions on what to consider when choosing database and hardware requirements before implementing GFI MailArchiver.

The following suggestion is provided as a guideline only:

- » Microsoft SQL Server 2012 Express is recommended for most of the configuration.
- » GFI MailArchiver Database should only be used for evaluation purposes.
- » For 150 seats and over, it is recommended to use Microsoft SQL Server as the backend database, and secondly to install GFI MailArchiver on a separate machine other than Microsoft Exchange.

4. Scheduled archive stores (Database management)

The next step is to set up the queue process that will periodically archive emails, and define a logical way to create and name your “archive store” so that it can be searched quickly.

Within GFI MailArchiver, the scheduled email archive process is called the Archive Store Schedule feature and each database is referred to as an archive store. Through this feature you can define when you want to create archive stores (e.g., quarterly) and GFI MailArchiver will create and start archiving to that store. This is important. By doing this you are:

1. Automatically keeping the archive store size under control by periodically (e.g., quarterly) archiving emails to a new archive store (“auto rollover”).
2. Creating archive stores for each quarter or year, for example, so that you can better manage which archive stores to allow network users to browse and search.

To take advantage of the Archive Store Schedule auto-rollover feature, there are a few things you need to do. If you are using:

1. **MS SQL for your databases** – databases are created automatically. This is described in more detail in Chapter 5.6 “Managing Archive Stores” of the GFI MailArchiver Administration and Configuration Manual.
2. **Built-in GFI MailArchiver database (Firebird)** – databases are created automatically, This is described in more detail in Chapter 5.6 “Managing Archive Stores” of the GFI MailArchiver Administration and Configuration Manual.
 - a. Database growth is managed by GFI MailArchiver. As soon as a database reaches its maximum limit a new database for the same period is created automatically.

5. Managing the search indexes

Many of our customers license GFI MailArchiver for compliance reasons. Our customers are often required to search through all archived emails for specific correspondence on a specific subject, during a specific time period, a specific user, etc. Searching through archived emails is simple with GFI MailArchiver.

In order to search the archived databases, however, search indexes are required. The indexes contain searchable data of archived emails and their attachments. This allows for fast and accurate retrieval of emails. Note that each archive store (database) has its own index.

The index management feature of the product allows you to set the schedule on which an email is indexed. The search index management feature allows you to rebuild your indexes. As the search feature is generally used by our clients because of compliance reasons, it is a critical feature of the product.

1. **We highly recommend that you set this schedule to start your indexing immediately!**
2. In the event an index needs to be rebuilt, it should only be done under the supervision of a GFI Technical Support Representative.
3. Re-indexing a database can be a timely process and while the index is being rebuilt, emails that have not yet been re-indexed will not be available via the search. The emails are re-indexed oldest to newest.

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