

GFI Archiver™ SmartGuide



This SmartGuide is an important tool to enhance your success with the GFI Archiver product.



Archiving for productivity, management and compliance

Welcome to GFI Archiver: The single-source solution for your archiving email, files and calendar entries in one central, secure location. GFI Archiver supports multiple email servers such as Microsoft® Exchange and Office365™.

Please visit this page for Office 365 integration details:

http://www.gfi.com/mailarchiver/GFIMailArchiver_Office_365_Integration_landscapeA4.pdf

Introduction

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

[GFI Archiver product overview](#)

[Why customers purchase GFI Archiver](#)

[Five major points to consider before deploying GFI Archiver](#)

GFI Archiver 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 Archiver 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 Archiver product overview

GFI Archiver is used to maintain a copy of corporate email correspondence, for management and compliance purposes, and reduce the company's need for PST files. GFI Archiver can also archive files from your computers using the File Archive Assistant.

Let's start with a review of what GFI Archiver 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 Archiver 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 Archiver Mailbox](#)". This is accomplished using the [GFI Archiver Outlook Connector Plug-in](#) or
 - b. Using the GFI Archiver 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 Archiver then connects to the Exchange journaling mailbox to retrieve the emails to be archived. This is discussed in greater detail in the [GFI Archiver Administration and Configuration Manual](#), Chapter 5.2 "Managing the Mail Servers to Archive".

Why customers purchase GFI Archiver

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

1. To significantly **reduce the processing and availability demands on the the email server such as Microsoft Exchange.**
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** or files for 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 Archiver

There are five major aspects of GFI Archiver 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 Archiver: 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 Archiver: How to determine licence count

The GFI Archiver license is comprised of two counts:

- Email user count
- File Archive Assistant count

For Email user licence: GFI Archiver counts all users in the Active Directory® (AD) domain that have email addresses. The number of Active Directory mailboxes is the number of GFI Archiver 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 Archiver has a few software prerequisites. These must be installed prior to installing GFI Archiver.

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 4.0/4.5
4. ASP.Net 4.0/4.5
5. Internet Information Services (ISS) – 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 or 64bit is installed):

Microsoft Exchange version	Microsoft Exchange version	Other required components
Exchange 2000/2003	Do not install MAPI CDO	Install MAPI CDO
Exchange 2007/2010/2013	Install MAPI CDO	Install MAPI CDO

8. Exchange journaling must be enabled
9. GFI Archiver will require a database to store archive data, 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 Archiver use MS SQL database to store their archive data. However, it is important to note that GFI Archiver only stores metadata in an SQL Server database while the raw email data would be stored encrypted and compressed on disk. 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 Archiver. 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 2008 R2 or above is suggested. GFI Archiver is capable of using multiple sql databases transparently for the end user. The 10GB limit of SQL Express is not reached since only part of the emails are stored within the database and the actual data is stored compressed on disk.
2. For installations below 150 mailboxes SQL Server Express 2008R2/2012 is adequate. For larger installs please refer to Table 2 below.
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 Archiver is an archiving product and the minimum requirements are only for GFI Archiver installation space requirements, and not for the storage space to hold archive data, so we have also provided some storage guidelines. Table 2 "**GFI Archiver recommended hardware specifications**"; should help you when deciding how much storage space you will need for your archive data.

Recommended configuration

GFI Archiver 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 Archiver 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. SQL Express 2008 R2 and above has a limitation of 10GB per database which can store up to half a million emails per database.
2. It uses 1 CPU only.
3. It uses a maximum of 1GB RAM.

When using MS SQL Express, archive stores are of SQL + FS type. That means that meta data is stored within the database and the actual archive data is stored compressed on disk

Table 2: GFI Archiver recommended specifications

Table 2 outlines the minimum requirements for GFI Archiver. 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 Archiver. The requirements for other services should be over and above the specifications below.

SMALL (<50 mailboxes or 2,500 emails/day) version				
Deployment	Exchange 2003	Exchange 2007 SP1/2010	Database*	Hardware*
Installed on Exchange 2007/2010/2013	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 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 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 Archiver 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 Archiver.

The following suggestion is provided as a guideline only:

- Microsoft SQL Server 2012 Express is recommended for most of the configuration.
- GFI Archiver 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 Archiver 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 Archiver, 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 Archiver 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 5.6 “Managing Archive Stores” of the GFI Archiver Administration and Configuration Manual.
2. Built-in GFI Archiver database (Firebird) – databases are created automatically, This is described in more detail in Chapter 5.6 “Managing Archive Stores” of the GFI Archiver Administration and Configuration Manual.
 - a. Database growth is managed by GFI Archiver. 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 Archiver 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 Archiver.

In order to search the archived databases, however, search indexes are required. The indexes contain searchable data of archived items 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

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 archive data is re-indexed oldest to newest.



For a full list of GFI offices/contact details worldwide,
please visit: www.gfi.com/contact-us

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