

GFI White Paper

*Going beyond Exchange 2010
- Why it pays to have a dedicated
email archiving solution*

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Introduction

In less than 20 years, email has progressed from a curiosity born out of academia to become the primary form of business communication today, displacing both the telephone and the fax machine in the process and still far ahead of mobile communications technologies such as SMS and instant messaging.

In 2010 alone, 107 trillion emails were sent across the open Internet. That number breaks down to 294 billion emails every single day of the year¹. In an enterprise environment, that number includes internal, site-to-site and external communications.

Combined with the knowledge that, in 2010, there are 1.88 billion active email users worldwide – a figure that is up 480 million from the year before – it quickly becomes clear that email is paramount to the way we communicate in the modern world, both personally and professionally.

Leading the field in email management and delivery is Microsoft Exchange 2010. While Microsoft Exchange 2010 does offer new deployment and storage options, improve inbox management capabilities, lower direct operational costs, and offer personal email archiving integrated into certain versions, it is not a dedicated email archiving solution.

With data protection, storage and conversation trails falling under the remit of growing industry and legal regulation, organizations of all sizes must take a proactive and cost-effective approach to managing email retention. For most, this means deploying a robust email archiving solution to supplement Exchange that can capture and archive a searchable record of all incoming and outgoing email, while at the same time making economical and reliable use of storage.

¹<http://royal.pingdom.com/2011/01/12/internet-2010-in-numbers>

The state of email archiving and data retention

Data is one of the most volatile assets in an organization, thanks to the ease with which it can be lost without hope of recovery. This is particularly true with Exchange email that has been archived or replicated on the client in an Outlook PST file, the point at which email is most vulnerable. While Microsoft has implemented many changes and improvements to the PST email archive used by Outlook, the format is far from foolproof and the larger the PST file gets, the slower Outlook will run, the longer it takes to search, and the more likely it is to corrupt resulting in a total or partial loss of data.

In environments without a good email archiving solution and strategy in place, mailbox quota sizes are frequently set as low as 250 MB, or as high as just 1 GB in order to balance demand for storage space while maintaining mail server and storage array performance. Taking into account current attachment types and sizes, 1 GB can be legitimately exhausted in days by some users.

The need to retain all emails is further complicated by the growth in attachment sizes, as attaching everything from Microsoft Office documents to videos and high-resolution photos has become the norm. Retaining attachments creates a sizable burden and the cost for that storage needs to be funded and managed.

In an effort to mitigate the challenges created by local PST files becoming lone silos for storing email, Exchange 2010 does offer archiving capabilities but these capabilities are basic and restrictive, lacking many of the features and flexibility needed within most organizations to successfully archive mail without disrupting workflow. Also, archiving in Exchange 2010 is only available as part of the Exchange Enterprise License. The inclusion of basic archiving in only the high-end version of the server immediately places a cost premium on the feature, and when you consider that for the same price some mail archiving solutions include anti-spam, antivirus and mail archiving as well, Microsoft's offering quickly becomes uncompetitive.

Failure to keep backups and functioning archives of email messages can quickly create massive disruption and financial loss for an organization, not least when emailed instructions from clients are called into question, timings for decisions need to be referenced, or users simply want to recall old email for research purposes.

Recent research by storage analyst MacArthur Stroud revealed that 40 percent of respondents failed to test their disaster recovery system more than once a year, while a third of respondents admitted they have no data archiving strategy in place whatsoever².

The survey, which went to 200 medium to large European enterprises, found that a four-hour loss of email might result in administrative disruption, inconvenience, lost productivity and decreased customer satisfaction.

Failed backups, read/write errors with storage devices and broken process scripts can, and often do, go unnoticed if the procedure is not tested and verified regularly. Failure to archive effectively or at all can lead to an organization being hit with significant fines by regulators, in addition to the data loss risk created by email being retained solely on client computers.

²<http://www.infosecurity-magazine.com/view/16139/report-claims-ukeuropean-firms-are-poorly-prepared-for-data-loss-event>

The compliance challenge

The importance of retaining and being able to recover email messages and conversation threads was underlined by financial services giant Morgan Stanley, which was fined \$15 million in 2006 for failing to retain emails³. The fine is the largest to date handed out in the US for failing to retain email that is relevant to the operation of a business and the relationship between organization and customer. It was not the first time that Morgan Stanley's retention of email was called into question.

The previous year Morgan Stanley was ordered to pay Ronald Perelman, the billionaire investor, \$1.57 billion in damages related to the sale of his camping equipment firm, Coleman, to Sunbeam Corporation. Perelman claimed the bank knew or should have known the perilous state of Sunbeam Corporation's finances, which filed for bankruptcy in 2001. Perelman alleged he suffered millions of dollars in losses because stock he received in the deal plunged in value. When challenged, Morgan Stanley failed to locate and hand over emails requested by lawyers detailing its guidance to Perelman on the deal.

Morgan Stanley appealed the decision and won, but the case and subsequent SEC fine highlighted the financial importance of retaining email and being able to recall it when challenged.

³<http://www.computing.co.uk/ctg/news/1833828/poor-email-controls-prove-costly>

The challenges facing IT departments in storing critical business email

The use of Exchange 2010's built-in capabilities must be measured against the needs of the organization and the expectation of customers, suppliers and regulators with regards to data protection and retention. This is especially true when reviewing archiving needs.

SMEs require cost-effective, reliable solutions that deliver a clear return on investment in terms of operational performance and competitive advantage. When choosing an email archiving solution, organizations need to consider whether the solution adequately deals with the following:

- » Dealing with Outlook PST files: The PST file format used by Microsoft Outlook as a silo for incoming and outgoing email is a point of risk for email data. Large, locally stored archive PST files put email at risk from corruption. With a good email archiving solution, mailbox size is no longer a key consideration for the end-user, and the IT department no longer needs to be concerned about capping mailbox sizes to manage storage load and server performance. Email contents and attachments from both incoming and outgoing emails can be captured, indexed and stored in a read-only format in a separate database off the email server. Also, by separating the archive from the immediate Exchange email repository, access to the archive is not lost if the mail server goes down for any reason.

- » Achieving compliance: Faced with a myriad of internal regulations that govern the retention of email including Basel II (Global), Sarbanes Oxley (US), the Data Protection Act (UK) and the EU Data Protection Directive, organizations must keep a contemporaneous record of all inbound and outbound communication. In the past, this has been tackled by retaining all email, including duplicate instances, creating a massive storage burden and retrieval problem in the process. Effective archiving, combined with centralized, read/write controlled access to the archive, will minimize the risk of accidental and malicious deletion of material while still enabling an organization to respond to legally binding requests for email conversation disclosure.
- » Improved internal performance and accountability: Email, like a letter, is a legally binding statement and must be retained in order for the organization to prove its position or disprove that of a customer or supplier in the event of a dispute. Archiving and retention at the point of reception allows for all conversations to be recorded for future disclosure and as proof of liability, while at the same time maintaining audit trails for anyone accessing the information or trying to delete material and alter the conversation timeline.
- » Improved data storage: A full-featured email archiving solution can significantly reduce the overall storage requirement for email. By removing reliance on PST files, emails and their attachments can be archived into more space-efficient database formats, allowing for better compression and data ordering that the PST format is not compatible with. Furthermore, email can be de-duplicated, meaning that the archive need only contain a single instance of an email. If the same mail is sent to 30 people in an organization, there is no longer a need to store that email – and its attachments – 30 times. A single instance can be retained, the rest discarded and the one copy served to any of the 30 original recipients on demand.
- » Effective search and data mining: The larger a PST file grows, the longer it takes to search through it. Also, retaining email in multiple archive PSTs creates another issue – the inability to search across multiple PSTs in a single search request. Each one needs to be mined individually. By centralizing the archive into a single, efficient database, search performance is increased and the problems of searching across multiple PST files is eliminated, improving operational and competitive performance and simplifying the process of locating legacy emails.

Choosing an archiving solution

The technologies needed to deliver effective email archiving without compromising on performance or reliability – and without losing control of costs – do exist and are within reach of the SME community.

When choosing an email archiving product, such as GFI MailArchiver, all the above points should be addressed effectively and efficiently. You need a solution that allows you to store email in a central location yet remains easily accessible in two ways: through a folder in your user's Outlook email client (including Outlook 2010), or by using a web browser. By integrating closely with Outlook in a first-in-its-class manner, the solution should also avoid the use of stub files which other products use but is not recommended by Microsoft. Although stub files are smaller in size, that reduced size of message does not really avoid the problems that stubbing was meant to prevent. Performance issues faced by Outlook users have more to do with large numbers of messages rather than large emails. Over time, these thousands of small stub messages amount to a performance hit since item counts is the primary performance driver for the Exchange store rather than aggregate size.

Message contents and attachments should also be automatically extracted from both incoming and outgoing emails at the initial server-side point of reception and, after being indexed, are stored in a read-only format – this ensures that your archived records are maintained in their original state.

By retaining all email in a single repository, your email database remains protected and can be used as a contemporaneous record of all inbound and outbound communication. Employees can still be granted full access to their archives, but in a read-only manner, protecting the integrity of the archive at all times. Even administrators with read/write access are unable to alter the archive contents unnoticed, due to full logging of activity that cannot be tampered with, essential for good compliance and robust legal defense.

Summary

While small and medium-sized enterprises do not typically produce or receive the same volume of email as a larger enterprise, businesses of all sizes face the same challenge: email is an ever-increasing silo of data that needs to be archived and recalled as needed.

By understanding how email is handled and stored, either centrally or locally, within the organization today, and looking at how that process can be improved through effective centralized archiving and robust retention, organizations can improve all aspects of email management and adherence to information management compliance, while at the same time improving the email experience for end-users.

About GFI

GFI Software provides web and mail security, archiving, backup and fax, networking and security software and hosted IT solutions for small to medium-sized enterprises (SMEs) via an extensive global partner community. GFI products are available either as on-premise solutions, in the cloud or as a hybrid of both delivery models. With award-winning technology, a competitive pricing strategy, and a strong focus on the unique requirements of SMEs, GFI satisfies the IT needs of organizations on a global scale. The company has offices in the United States (North Carolina, California and Florida), UK (London and Dundee), Austria, Australia, Malta, Hong Kong, Philippines and Romania, which together support hundreds of thousands of installations worldwide. GFI is a channel-focused company with thousands of partners throughout the world and is also a Microsoft Gold Certified Partner.

More information about GFI can be found at <http://www.gfi.com>.

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