

Data Migration is a New Requirement for E-mail Archives

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Abstract: Unofficially, the e-mail archive market is now a decade old (give or take a few months) and customers have spent the past ten (or so) years enjoying tremendous compliance, electronic discovery, and storage benefits thanks to e-mail archive solutions. But with data being retained for longer periods of time, customers may encounter some unexpected challenges, namely, changing archive software or the underlying storage. These changes can be driven by products not meeting a customer's requirements or standard hardware refreshes, amongst others. Ultimately, the 'why' isn't important; customers must be prepared for e-mail data migration.

Introduction

At the turn of this decade, ESG began tracking a few vendors that were building e-mail management solutions designed to move messages from a primary environment to lower cost systems. This software was geared to be intelligent Hierarchical Storage Management (HSM) for e-mail as message-related storage costs were growing out of control—so fast that companies began enforcing quotas to help curtail capacity consumption. These products became known as e-mail archive solutions and adoption took off in late 2003/early 2004 when financial services firms began using them as a means to meet record retention regulations.

Today, ESG estimates that over one third of North American companies have deployed e-mail archive solutions—and worldwide adoption rates are likely to be very similar.¹ Many of these companies utilize e-mail archiving to expedite electronic discovery requests as eight of ten inquiries involve messages and their attachments (see Figure 1). Other organizations use the software to optimize e-mail storage environments, removing the need for productivity-killing quotas. There are also still plenty of companies using the solutions to comply with a variety of record retention regulations.

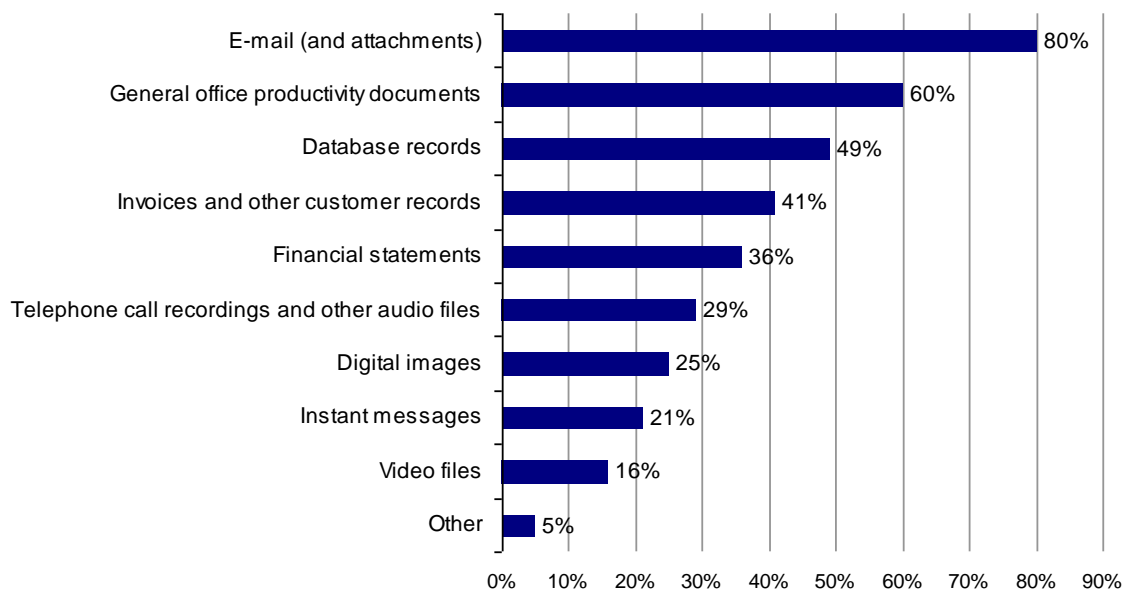
E-mail archive solutions continue to evolve as many vendors are now offering the functionality via a SaaS model. Others are adding more data analysis features to facilitate electronic discovery processes and some are integrating with mobile devices so employees can access archived messages with their PDAs. All of these innovations are great for customers, but there is a more fundamental capability that e-mail archive vendors/archive storage system vendors or their partners will need to offer: data migration.

Companies are archiving messages for longer periods of time because this data is often extremely important to the business. While these retention periods lengthen in the data center, outside of the data center, e-mail archive software vendors may get bought, go out of business, or drastically change their products. Similarly, with hardware warranties averaging three years, there is a high likelihood that new storage will be deployed during the lifetime of an archive. All this boils down to one important fact: an e-mail archive customer will probably have to migrate data at some point.

¹ Source: ESG Research Report, *2007 E-mail Archiving Survey*, November 2007.

FIGURE 1. MAJOR RECORD TYPES REQUESTED IN E-DISCOVERY PROCEDURES

To the best of your knowledge, which of the following record types has your organization been asked to produce in a legal proceeding or regulatory inquiry? (Percent of respondents, N = 107, multiple responses accepted)



Source: ESG Research Report, *Electronic Discovery Requirements Escalate*, November 2007

E-mail Archiving is Here to Stay

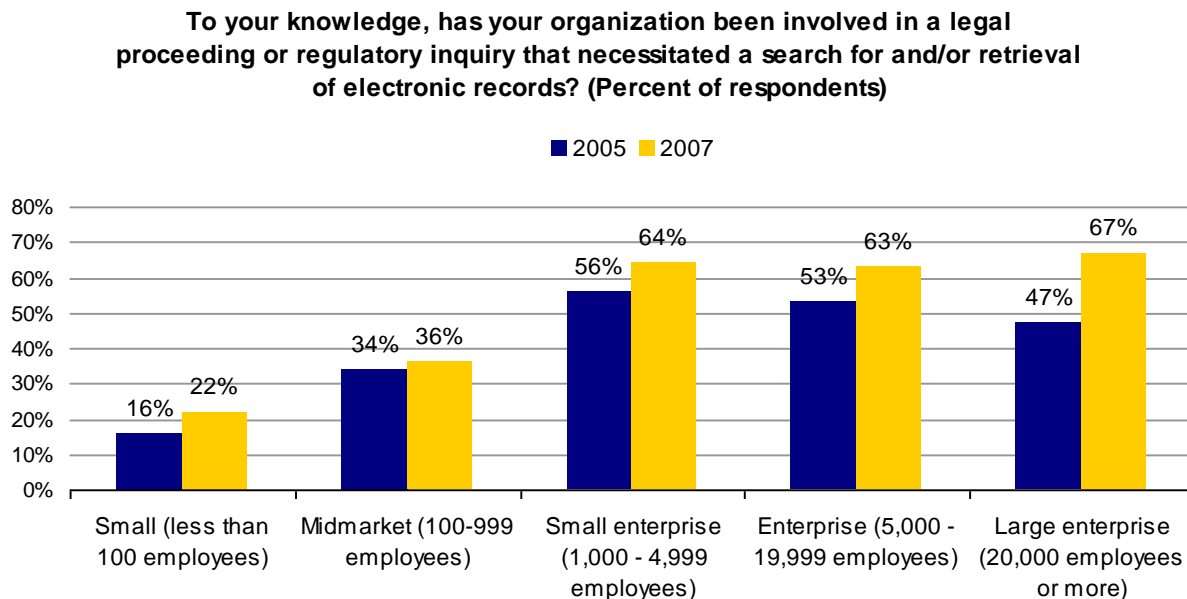
The first offerings were designed to remove old messages from the primary messaging environment, allowing employees to access old messages without creating offline personal archives. Personal archives became necessary when IT began enforcing mailbox quotas to keep message-related storage capacity under control. However, as e-mail products entered the market, financial services firms used them to respond to regulatory inquiries that encompassed producing messages between brokers and their clients. To meet these requests, the firms had to go to backup tapes to get the messages, which existed because they are required by law to retain broker/dealer communications.

In 2003, Wall Street firms, tired of paying upwards of \$3,000 per backup tape to restore messages, found a better way to save e-mails. E-mail archive solutions allowed firms to set specific retention periods on messages and store them on the mandated non-erasable, non-rewriteable media. The biggest benefits included the ability to retain e-mail and attachments in native format, the ability to have all the content indexed (making it searchable), and the capability to store the data on online storage media—even if the storage systems were slower than those that supported the primary messaging environment.

Of course, financial firms quickly realized that e-mails provided unique insight into their businesses as litigators joined regulators in targeting older messages as sources of evidence. E-mail archives soon supported all electronic discovery inquiries, allowing broker/dealers to respond to requests much faster and cost effectively. No longer did compliance officers have to search desktops and file shares for messages in personal archives.

With demand spurred by the financial services firms, more e-mail archive vendors emerged. In 2005, it became apparent that e-mail, along with other electronically stored information (ESI), was going to be viable sources of evidence for years to come. The Federal Rules of Civil Procedure, the mandates which govern civil law processes, were to be amended in December 2006 with a majority of changes centered on how companies will have to manage and produce ESI. As a result, companies in any industry needed to be able to respond to electronic discovery requests. Recent ESG research uncovered that a company's size is not a factor regarding the likelihood that it will be involved in an electronic discovery event (see Figure 2).

FIGURE 2. INCREASE IN E-DISCOVERY ACTIVITY 2005 – 2007, BY ORGANIZATION SIZE



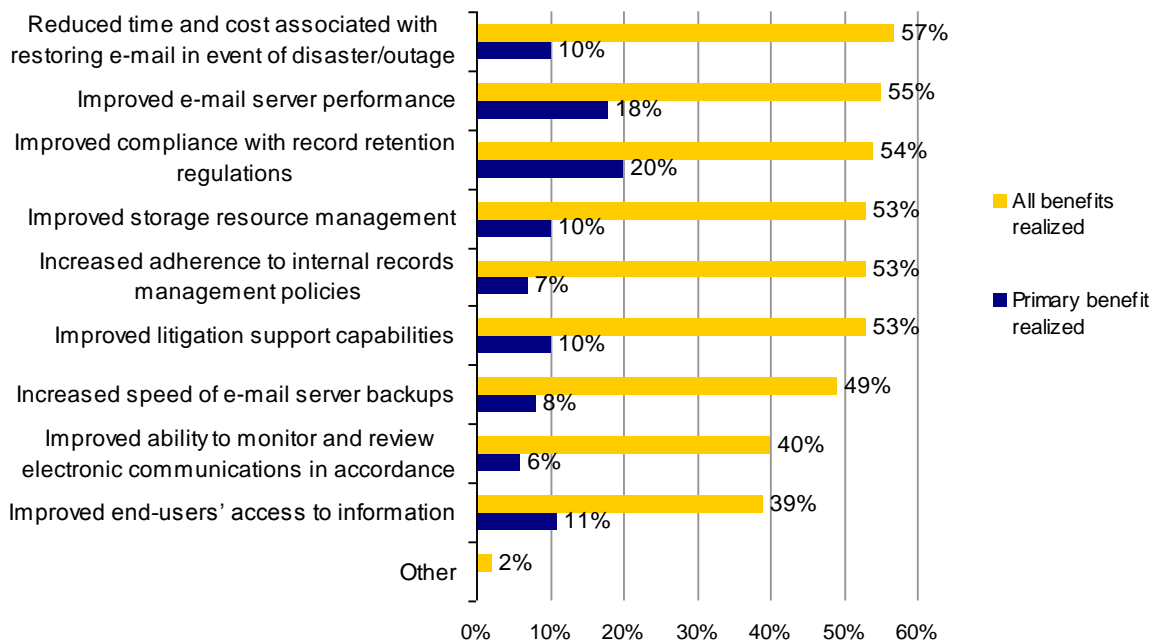
Source: ESG Research Report, *Electronic Discovery Requirements Escalate*, November 2007

Electronic discovery requirements, which are most commonly faced by organizations operating in the U.S., made e-mail archives necessary for all businesses—not just financial organizations. After deploying e-mail archiving for either compliance or electronic discovery purposes, customers began realizing the storage benefits that the products were originally designed to provide. With older messages being culled from mailboxes and placed into an archive, backups of the primary messaging applications ran faster. Employees were more productive as they did not have to manage their own messages in the face of quotas. IT was able to save more messages for longer periods of time in a central, less costly location.

Today, many e-mail archive customers are getting multiple benefits out of their e-mail archive (see Figure 3) and, as a result, ESG expects that more companies will ditch quotas, tape-based record retention programs, and ad hoc electronic evidence collection in favor of these solutions.

FIGURE 3. E-MAIL ARCHIVING BENEFITS REPORTED BY CURRENT USERS

What benefits has your organization realized since implementing an e-mail archiving product or service? (Percent of respondents, N = 83)



Source: ESG Research Report, 2007 E-mail Archiving Survey, November 2007

Market Drivers Mandate Migration

There are two primary catalysts that would drive a customer to migrate e-mail archive data: changing software and changing hardware. On the surface, these reasons may seem simplistic, but a close look at how these events come about reveal a level of complexity that many users may not consider.

Isolating the software impetus, a customer must acknowledge that it might be forced to move to a different solution. The e-mail archive solution may not meet the customer’s continuing needs, the software may not scale as it is deployed to new users, or search and retrieval performance slows as the amount of data in the archive increases. Sometimes, an e-mail archive vendor is acquired and the acquiring company fails to retain the right engineers, customer service representatives, and other pertinent employees—leading to poor support and slow product development. Vendor consolidation is also an issue, as several e-mail archive-related acquisitions have already taken place (EMC/Legato; Symantec/KVS, Inc; CA/iLumin; Autonomy/Zantaz; HP/Persist). ESG expects more as the market matures. Lastly, a customer may choose to cease running an e-mail archive in-house, moving to a SaaS solution. While this may not be a pure software migration, it essentially requires the same data movement.

Not all e-mail archive migration decisions are under the customer’s control. A majority of storage system vendors provide three year warranties for their respective products. When coverage ends, a customer can either choose to extend those warranties—usually at a substantial cost—or move to a new system. Moving to a new system is typically the default choice because it allows organizations to take advantage of new technology. In other instances, a customer may not be happy with its existing archive storage system because, like the aforementioned reasons for software dissatisfaction, the product is not able to meet ongoing needs. There is also a chance that the storage system vendor is acquired or goes out of business.

Not Basic Data Movement

E-mail archive migrations can be very complex because software solutions are often multi-tier applications and every storage systems keeps data differently. E-mail archive applications are often composed of an index that is used to search messages and the logical repository where content is retained. When migrating information between e-mail archive software products, the repository data is moved and a new index is created by the target solution. Every e-mail archive software product manages information differently and these nuances must be addressed. For example, one e-mail archive software application may separate a message from its associated attachments when storing the data in a repository while another solution keeps both of them together.

Storage hardware migrations can be complicated as some systems store information in proprietary formats where metadata is kept separate from the actual messages and files. Other storage devices utilize their own file systems to organize the data as it is being sent from the e-mail archive. In compliance and electronic discovery situations, different storage systems have varying Write Once, Read Many (WORM) configurations that can also complicate migrations.

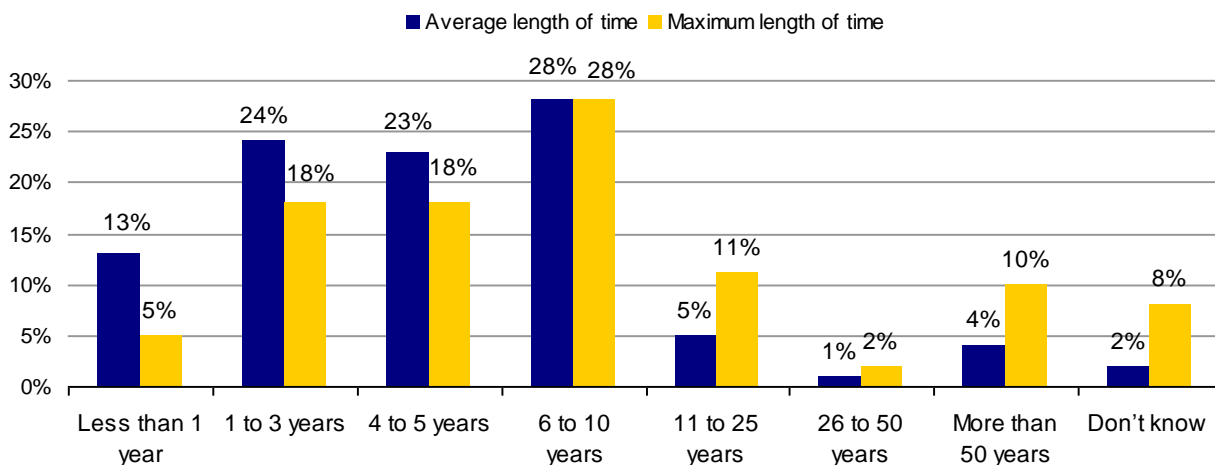
So many e-mail archive hardware and software solution variances can make migrations extremely challenging. And, for most companies, there is absolutely no tolerance for poor execution. Everyone uses e-mail and many employees rely on message archives to do their jobs. During a migration, if data is not available for an extended period of time or if messages are lost, there can be a measurable productivity impact. This issue is magnified by corporate attorneys and compliance officers dealing with tight deadlines to produce messages during electronic discovery. As a result, the migration process must be non-disruptive and should include the ability to generate data authenticity and integrity reports.

Keep a Long Term Perspective

Of those organizations currently using e-mail archive solutions, nearly one half are keeping messages between four and ten years (see Figure 4). Some companies are saving e-mails for up to fifty years. With more business being conducted electronically, electronic discovery events will continue to occur and legal matters can last for several years. As it is, approximately 50% of U.S. corporate counsels surveyed by ESG said that data requested during electronic discovery is at least three years old.²

FIGURE 4. E-MAIL ARCHIVING BENEFITS REPORTED BY CURRENT USERS

To the best of your knowledge, what would you say is the length of time for which your organization retains archived e-mail information? (Percent of respondents, N = 83)



Source: ESG Research Report, 2007 E-mail Archiving Survey, November 2007

² Source: ESG Research Report, *Electronic Discovery Requirements Escalate*, November 2007.

If you are a current e-mail archive customer, these statistics probably make sense, although many of you are still in the early stages of retaining messages. If you are thinking about purchasing an e-mail archive solution, take a long term view. E-mail has been at the core of business communication and collaboration—and this is unlikely to subside any time soon.

The Bottom Line

Over the next four years, ESG expects organizations to archive nearly 30,000 petabytes of e-mail.³ The benefits of storage optimization, efficient electronic discovery, and seamless record retention compliance are too great for customers to ignore. Over the past ten years or so, e-mail archive solutions have systematically added functionality to make these opportunities a reality for many customers. Now, a new market requirement is starting to manifest in those adopters who—for a variety of reasons—want to change e-mail archive software or the storage hardware supporting it (or both). E-mail archive data migrations are going to become more common and customers must be prepared for such events. This means talking with services organizations, whether they are independent or part of an e-mail archive application/storage system vendor on a consistent basis. One never knows when an event driving the need for a migration will occur.

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³ Source: ESG Research Report, *2007 E-mail Archiving Survey*, November 2007.