

# **EMC EmailXtender Provides E-mail Records Management for Microsoft Exchange Server 2003**

Abstract: Microsoft Exchange Server 2003 and EMC EmailXtender work together so organizations can manage their IT operations to comply with e-mail retention requirements. An overview of applicable regulations is also provided.

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## Introduction

E-mail is an increasingly used, and increasingly indispensable, communication and business tool. Today's IT departments are challenged to keep up with the growth in e-mail usage—IDC estimates the number of e-mails sent daily will grow to 35 billion by 2006—especially when coupled with regulations that require companies to retain e-mail and maintain access to it.

For organizations subject to industry regulations as well as broader mandates such as the Sarbanes-Oxley Act, it has become critical to manage e-mail the same as any other data. Various regulations have for years required companies to retain document hard copies and recorded conversations; these efforts now apply to e-mail and other electronic documents. Headlines touting multi-million dollar fines for companies failing to meet these new requirements have gained attention in boardrooms and data centers.

The function most impacted by these regulations is IT. While meeting regulatory obligations is the responsibility of the compliance officer, legal counsel, or C-level executive, it is the IT Exchange Administrator who must deal with the realities of retaining terabytes of e-mail messages and attachment data and making it accessible when needed. The challenges are many, including the following:

- Capturing and managing e-mail as a record of business (including retention and disposition)
- Searching and retrieving data—accurately and easily
- Outputting relevant materials for auditors
- Securely storing archived data and providing audit trails for user access
- Proving e-mail authenticity if required

Many organizations are seeking a system that can safely store their Microsoft® Exchange Server data in a searchable, retrievable format. Thanks to its enhanced ability to archive, or journal, messaging data, both within an organization and to and from external systems, Microsoft Exchange Server 2003 makes it easy for organizations to capture and verify e-mail communications.

EMC EmailXtender works with Microsoft Exchange Server 2003 to provide a solid solution for meeting regulatory requirements and addressing the resulting IT issues. EMC EmailXtender is a comprehensive e-mail archiving and management solution that captures (in real time), indexes (full text), and archives e-mail, instant messages, and attachments. The product provides full management of the e-mail lifecycle—from e-mail record creation to record disposition or deletion. EmailXtender enables organizations to comply with regulatory requirements, including those from the Securities Exchange Commission, regarding e-mail record retention and archiving. It also helps organizations reduce the risks and costs associated with responding to litigation or discovery requests by making records easily accessible, ensuring that e-mail and instant messaging records cannot be altered, and providing full auditing and reporting capabilities.

## Importance of messaging

It goes without saying: E-mail is critical for running most productive and efficient businesses. For many users, Microsoft Office Outlook is the first application they open when they arrive at the office, and the last one they check before going home. Even after business hours, users increasingly check and respond to e-mail using Microsoft Office Outlook Web Access, RPC over HTTP(S), or a virtual private network (VPN) connection. Document approval processes often flow through the e-mail messaging system rather than on paper.

Many other technologies are changing the ways businesses communicate. For instance, Microsoft Windows Messenger offers a communication and collaboration alternative: Instant Messaging (IM). Many organizations are beginning to deploy this service in-house using Microsoft Office Live Communications Server 2003. IM enables information workers to communicate rapidly and see who is online in real time.

They can initiate, respond, or ignore IM conversations without the productivity drains of disruptive phone calls, “phone tag,” and paging.

IM can be integrated with existing directory, e-mail, and office technologies, and offers users many benefits, including the following:

- Quick, unobtrusive access to coworkers
- Simple, consistent communications with remote offices
- The ability to easily and quickly update availability and status

Given today’s many communications options and the heightened emphasis on retaining and auditing business communications, it is vital that organizations be able to track, maintain, and retrieve their communications data. The ideal solution would efficiently manage this data, store it in its original format, and make it easily searchable and retrievable. Microsoft Exchange Server 2003 and EMC EmailXtender combine to offer EMC storage customers an end-to-end solution that meets these demanding requirements.

## **Regulatory overview**

Many industries provide regulations for e-mail retention. The following regulation descriptions offer a general overview and commonly accepted interpretations, but should not be construed as legal advice.

### ***SEC 17a-4***

Securities Exchange Commission (SEC) Rule 17a-4 requires registered Securities broker-dealers to preserve records of internal and external communications, including e-mail and other electronic communications, for three years; during the first two years, these communications must be kept in an accessible place. Most firms now include all non-registered personnel who are a part of broker-dealer operations. SEC 17a-4 also states that records are to be created routinely and immediately, indexed, and preserved in a non-rewriteable, non-erasable format. Records must also be immediately available for review by the SEC or a self-regulating organization (SRO) through the firm’s electronic storage system. Auditing practices must also be in place. For more information, please visit the EMC Legato® press page, [http://www.legato.com/corporate\\_info/pressroom/presslist.cfm](http://www.legato.com/corporate_info/pressroom/presslist.cfm), and see the press release dated 4/15/2004.

### ***NASD 3110***

NASD 3110 is the National Association of Securities Dealers (NASD) Books and Records rule, which references SEC 17a-4 and makes it applicable to NASD members. The NASD is an SRO for broker-dealers; it audits its members on this and other rules.

### ***HIPAA (Health Insurance Portability and Accountability Act of 1996)***

One component of the broad HIPAA law concerns the archiving and retention of e-mails containing protected health information. HIPAA applies to all organizations and persons that deal with health care information including hospitals, physicians, pharmacists, nurses, clinics, insurance companies, and medical billing agencies. The law requires them to archive and retain e-mails containing protected health information for six years.

## **21 CFR Part 11**

This law covers the use of e-mail by pharmaceutical firms to exchange research data and submit applications. It requires organizations to preserve all electronic records as well as to employ procedures and controls including the use of computer-generated time stamps for authentication, which is especially important when patents are challenged.

## **DOD 5015.2-STD**

This law sets forth baseline functional requirements for records management application software used by Department of Defense (DoD) components. Recommended for all Federal Civilian Agencies, the law sets forth best practices and requirements that govern the creation, maintenance, use, reproduction, and deletion of all records, including electronic records and e-mail.

## **Telecommunications CFR Title 47, Part 42**

This law requires the capture and retention of e-mail records regarding account statements, service notifications, and other business-related communications for auditing purposes.

## **Sarbanes-Oxley Act (SOX)**

SOX Section 103 states that publicly traded companies and/or their auditors must maintain all audit-related records, including electronic ones, for up to seven years. Included are all records created, sent, or received in the course of an audit, including working papers or documents.

Gartner Group has interpreted SOX conservatively, regarding e-mails sent and received during the audit process as working documents. According to Gartner, “An enterprise that fails to manage e-mail as a record is testing fate.” (2 April 2003)

## **Translating regulations to IT requirements**

To fully achieve compliance with various e-mail retention regulations, IT departments in the affected industries must implement an e-mail archiving and management system capable of providing the following functions.

### ***E-mail record capture***

The journaling capability of Microsoft Exchange Server 2003 ensures your organization can capture e-mail data—regardless of the type of e-mail data, and how the data is to be captured. EmailXtender provides the flexibility to contend with complex requirements.

### **Journaling**

Microsoft Exchange Server 2003 provides full journaling capabilities, able to capture all unaltered e-mail messages it routes. Most compliance regulations require that messages be archived at the time they are sent. Microsoft Exchange Server provides each “storage group” with up to four “mailbox stores.” Further, each mailbox store can be journaled to the same journaling mailbox or to separate ones, including journaling mailboxes that reside on dedicated Exchange Server journaling servers (backend servers) for larger environments. Because one EMC EmailXtender server can process more than 110,000 messages per hour, one EmailXtender server supports the journaling of many Exchange servers and thousands of users at the same time.

## Method of e-mail capture

Recent regulatory actions have caused many organizations to broaden their view of which e-mail communications need to be captured. Most believe the regulations extend to all internal and external e-mail. From a compliance perspective—as well as from corporate governance and legal discovery perspectives—the wisest course of action is to capture all incoming and outgoing mail in real time.

However, in the financial services industry, generally accepted practice is to capture e-mail from all personnel who are part of broker-deal operations—both registered and non-registered—but not, necessarily, the e-mail of all personnel companywide.

Such differing interpretations require that Exchange Administrators have the flexibility to capture all e-mail as well as the e-mail of only certain users. With this flexibility, organizations can change their actions to match evolving regulations, or satisfy different regulations separately within and across different divisions.

EMC EmailXtender enables companies to choose server-based or user-based capture methods. The server-based option is best for organizations wishing to capture e-mail for all employees; all mailboxes on one or more servers are captured. User-based capture enables organizations to capture all e-mail from, or to, a named list of employees. Employee mailboxes captured through this method need not be hosted on the same server. This method suits, for example, financial services organizations with multiple businesses that may include brokers, investment advisors, and insurance or banking firms. These lists of employees may be managed as part of an LDAP-enabled directory service or an e-mail address book. This method of capture supports EmailXtender's policy-based retention policies (discussed in "*E-mail Record Archiving and Retention*," below).

## Capture and management of non-Microsoft Server Exchange data

Because organizations that standardize on an Exchange Server 2003 messaging platform may also have to manage non-Exchange data—all it takes is one merger or acquisition to become the owner of non-Exchange data—support for heterogeneous mail applications is crucial. This data will have to be indexed, retained, and remain accessible both for regulators and employees.

Exchange Server 2003 customers can use EMC EmailXtender to capture non-Exchange messages including Lotus Notes/Domino, Sendmail, Bloomberg mail, and IM. The messages are full-text indexed and compressed, duplicates are removed, and the data is retained with Exchange messages in a single EmailXtender database so it can be searched as one message store. This ensures that customers can migrate from other platforms to Exchange Server 2003 while retaining e-mail regulation compliance and Exchange accessibility.

## Message capture during Exchange 2003 upgrade

EmailXtender supports a mixed Exchange Server environment—as occurs when organizations upgrade to Exchange Server 2003 or inherit other Exchange Servers through an acquisition—and can simultaneously capture data from Exchange Server 5.5, 2000, and 2003. This not only helps organizations comply with various regulations, but enables them to continue the centralized management of e-mail.

Support for a mixed Exchange Server environment can especially benefit a company that wants to upgrade its Exchange Server software incrementally, one (or more) server at a time. Exchange Administrators can archive all of the mailboxes residing on an Exchange 5.5 server, for example, significantly reducing migration time by decreasing the data they need to migrate. Administrators may even choose not to move the data at all; the data exists in the archive, so when the users' profiles are moved, Administrators can still access their messages directly from the archive.

## ***E-mail record archiving and retention***

Recent regulations concerning e-mail retention and archiving, coupled with the explosive increase in the use of e-mail, have resulted in huge message stores. IT departments must choose an e-mail archiving and management solution that meets and even exceeds the challenges posed by this data volume and complexity.

### **Supporting different retention requirements**

Because organizations such as large financial services companies can be affected by different regulations across different divisions, they must be able to set separate retention policies for different data. EmailXtender provides this capability.

EmailXtender assigns data to archive or container files based on the policy set for that data, and each container file is ruled by a separate retention and disposition policy. This feature enables companies to easily comply with regulations while managing the data in the manner they wish. And because EmailXtender enables data disposal when appropriate, the data volume in the archival database can be kept as lean as possible, further reducing backup and storage costs.

### **Reducing backup costs**

Huge message stores can result in increased backup costs resulting from poor backup server performance, additional tape requirements, and additional offsite storage costs. The right e-mail archiving and management solution can save organizations enormous amounts of money.

EmailXtender automatically migrates all data from the messaging server into the EmailXtender archival database, reducing the data volume to be backed up. EmailXtender stores all data in a single database (unlike other solutions that create separate archives for each user, increasing storage volumes). EmailXtender stores a single instance of each message and attachment, and keeps a record of everyone who received it. EmailXtender also compresses the data 2:1, decreasing the size of the archival database even further. Taken together, these features drastically reduce the archival database data to be backed up, resulting in faster backup times and significantly reduced backup and storage costs.

### **Improving performance**

EmailXtender migrates data from Exchange Server 2003 into the EmailXtender archival database, freeing up server space and improving overall messaging performance.

## ***Record storage***

To comply with e-mail retention and archiving regulations, organizations must be able to store e-mail data on non-erasable, non-rewriteable media. WORM optical and the Network Attached Storage (NAS)-based EMC Centera are the most widely used storage technologies for this purpose. EmailXtender supports storing archived e-mail data on EMC Centera, as well as on other EMC storage options and storage solutions from other vendors.

SEC regulations set the standard for this requirement. The SEC issued an Interpretive Release (No. 34-47806) in May 2003 that essentially clarified its acceptance of the EMC Centera approach to non-volatile, non-rewriteable archive storage. The Release states that “[while magnetic disk] is inherently rewriteable, the integrated codes intrinsic to the system prevent anyone from overwriting the records.”

EMC Centera has become a recognized best practice. Although historically firms selected removable-media WORM devices such as the HP2200 MO library, most organizations today select EMC Centera as their target e-mail storage device.

## ***Record disposition***

In the same way that organizations may need to retain data differently, they may also need to apply different disposition policies to different data. For example, some data may go to offsite storage, while other data may have reached the end of its retention requirement and be eligible for disposal.

EmailXtender meets this requirement by enabling organizations to apply different disposition policies to different container files.

## ***Access and retrieval***

E-mail retention regulations require that organizations be able to access and retrieve a variety of data quickly—often within 24 hours of the regulator’s request. Therefore, regulated organizations must employ a system that can perform fast, thorough, accurate searches.

### **Search parameters**

Because audit requests can call for various combinations and amounts of e-mail data, EmailXtender can search the archival database(s) for specific users, by subject, by a lexicon of search terms, on a range of dates, or by a combination of these criteria.

### **Accuracy of results**

EmailXtender ensures accurate results by expanding distribution lists, at the time of archiving, into user addresses and account names. It also supports account aliasing, associating all e-mail, IM, Bloomberg, and other e-mail account names with a single employee ID or mailbox.

### **Performance**

EmailXtender provides high-performance searches of the archival database. Searches are performed simultaneously across multiple EmailXtender servers (when present) for fast results. For example, a recent internal test for a single keyword search returned 89,000 messages in only 17 minutes, 6 seconds (utilizing EX4.6 SR1), and a test search resulting in 1 million messages took only 24 minutes, 47 seconds.

### **Data delivery**

Once the query is performed, EmailXtender can deliver records in their original format and in a readily accessible form. For example, Exchange Server 2003 users would receive data in a PST file. The data is usually delivered by saving the database to a CD-R disc, protecting results authenticity and integrity.

## ***Auditing***

Regulators require an audit trail to indicate who, in addition to the original owners of the e-mail, viewed or opened documents. EmailXtender preserves the integrity of the EmailXtender archive database by keeping an audit trail of all record inputs, record changes, and record deletions for the time specified.

## ***Supervision***

Some organizations, particularly broker-dealers, may be required to not only retain and access e-mail, but also to monitor it to ensure compliance with other regulations. The National Association of Securities

Dealers (NASD), for example, requires brokerage firms and securities dealers to establish procedures for monitoring incoming and outgoing electronic communications relevant to their investment banking or securities businesses. These procedures must include reasonable communications supervision and ensure auditable records of supervisory reviews are maintained.

EMC EmailXaminer, a member of the EmailXtender suite of products, helps companies monitor e-mail content to ensure compliance with government regulations. EmailXaminer automates and optimizes supervisory activity, providing a cost-effective and easy-to-use means of complying with NASD rules. EmailXaminer offers a variety of advanced surveillance capabilities designed specifically for compliance with e-mail regulations and policies. These capabilities include message sampling, customizable automated procedures, intelligent cross-mailbox searching, purging, and more.

## Conclusion

Microsoft Exchange Server 2003 and EMC EmailXtender provide a solid foundation to help IT departments meet regulatory e-mail retention requirements. EmailXtender extends the Microsoft Exchange Server's native capabilities to ensure compliance.

### Additional resources

Please see the following sites for more information:

[www.legato.com/exchangealliance](http://www.legato.com/exchangealliance)

<http://www.emc.com/microsoftsolutions/>

[www.legato.com/nasalliance/exchange](http://www.legato.com/nasalliance/exchange)

[www.legato.com/microsoft](http://www.legato.com/microsoft)

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