

LEARNING MADE EASY



Micro Focus  
Special Edition

# Information Archiving

for  
**dummies**<sup>®</sup>  
A Wiley Brand



Archive all email,  
social media, mobile data

Quickly perform eDiscovery  
& case assessment

Immediately reduce costs  
and mitigate risk

Brought to  
you by:

 MICRO  
FOCUS

 GWAVA.

Christina Wood  
Que Mangus  
with Andrew Moore



# Information Archiving

Micro Focus Special Edition

**by Christina Wood  
and Que Mangus  
with Andrew Moore**

**for  
dummies<sup>®</sup>**  
A Wiley Brand

# Information Archiving For Dummies®, Micro Focus Special Edition

Published by  
**John Wiley & Sons, Inc.**  
111 River St.  
Hoboken, NJ 07030-5774  
www.wiley.com

Copyright © 2017 by John Wiley & Sons, Inc.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

**Trademarks:** Wiley, For Dummies, the Dummies Man logo, The Dummies Way, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates in the United States and other countries, and may not be used without written permission. Micro Focus and the Micro Focus logo are registered trademarks of Micro Focus. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc., is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

For general information on our other products and services, or how to create a custom *For Dummies* book for your business or organization, please contact our Business Development Department in the U.S. at 877-409-4177, contact [info@dummies.biz](mailto:info@dummies.biz), or visit [www.wiley.com/go/custompub](http://www.wiley.com/go/custompub). For information about licensing the *For Dummies* brand for products or services, contact [BrandedRights&Licenses@Wiley.com](mailto:BrandedRights&Licenses@Wiley.com).

ISBN: 978-1-119-45063-4 (pbk); ISBN: 978-1-119-45059-7 (ebk)

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

## Publisher's Acknowledgments

Some of the people who helped bring this book to market include the following:

**Project Editor:** Carrie A. Burchfield

**Acquisitions Editor:** Katie Mohr

**Editorial Manager:** Rev Mengle

**Business Development**

**Representative:** Ashley Barth

**Production Editor:** Siddique Shaik

# Table of Contents

INTRODUCTION .....	1
About This Book .....	1
Icons Used in This Book.....	2
<b>CHAPTER 1: From Then to Now: The Evolution of Information Archiving.....</b>	<b>3</b>
The Evolution of Information Archiving.....	4
Social Media, Mobile Collaboration, and BYOD Policies.....	6
Social Media in the Workplace.....	9
The Future of Archiving in an Integrated Data World.....	11
<b>CHAPTER 2: What Keeps You Up at Night?.....</b>	<b>13</b>
Will My Business Be Involved in Litigation?.....	13
Looking at the Top Concerns of the CIO and the IT Director .....	16
Mitigating the Risks Facing the Chief Compliance Officer .....	18
Ensuring the Chief Security Officer Can Keep Data Safe .....	20
Keeping It Legal: Challenges Facing the Chief Legal Officer.....	21
Complying with Human Resources Regulations.....	23
<b>CHAPTER 3: The How and Why of Information Archiving.....</b>	<b>25</b>
The Drivers of Information Archiving .....	25
Litigation .....	26
Regulatory compliance.....	26
Storage management.....	27
Knowledge management.....	28
End-user and IT productivity .....	28
What Content Must Be Archived?.....	28
The need to produce content.....	29
New content types that must be archived.....	30
Archiving for the Long Term .....	31
Migrating from one archiving system to another .....	31
Key issues to consider .....	31

**CHAPTER 4: Archiving 2.0: Adding Intelligence to Your Data**..... 33

    Archiving 2.0..... 33

    Introducing Micro Focus Retain..... 37

        Retain Unified Archiving..... 37

        Retain Email Archiving..... 38

        Retain Mobile Archiving ..... 38

        Retain Social Archiving ..... 38

**CHAPTER 5: Ten Questions about Data Archiving** ..... 39

# Introduction

If you've always wondered what information archiving is and how it can help your business not only survive but also thrive against the competition, you've come to the right place.

When most people think of information archiving, they may think of big rooms full of filing cabinets storing all kinds of documents, memos, and letters that are kept just in case they might need them later. More recently, computers and email systems have replaced memos and letters, and now, people think of emails and other document files being stored on racks of computers in a data center somewhere instead of being stored in filing cabinets.

Information archiving still involves keeping data around for use in the future, but it's much more than that. Our culture has become increasingly litigious in recent years and government regulations and industry compliance rules are cropping up at a speed never seen before. In the last decade or so, email use has been declining, but social media use has exploded, changing the dynamics of information archiving. An increasing amount of corporate communications is taking place in media that reside outside of corporate networks, challenging the ways in which corporations can monitor and store these types of information.

Information archiving has evolved from just a defensive, static storage of data used in case of possible future litigation or regulatory audits into a dynamic, offensive strategy to streamline the retrieval of archived information and to leverage this past information to derive insights about the future and allow businesses to make proactive decisions instead of simply reacting to events in the past.

## About This Book

This book is designed to explain how information archiving has evolved from simply archiving email messages to monitoring and capturing social media data and business communications captured on employees' personal devices inside or outside of corporate networks. You also discover that information archiving can

be used, along with machine learning, to make future predictions based on data collected in the past to be proactive and gain a competitive advantage.

## Icons Used in This Book

In this book, you see the following four icons to give you a hint about things in information archiving that you need to focus on or things that might be of interest to you.



TIP

The Tip icon points out some time- or frustration-saving information that helps you out as you read more about information archiving.



REMEMBER

When you see this icon, I point out core information that you should take away from a topic such as basic government regulations or other rules you should follow to use information archiving.



WARNING

When you see the Warning icon, I give you challenges of archiving and what to avoid.



TECHNICAL  
STUFF

The Technical Stuff icon gives you some extra information related to technical details of information archiving. What you see is information that isn't essential to information archiving but gives you some additional context you may find helpful.

## IN THIS CHAPTER

- » Revisiting the past uses of information archiving
- » Investigating the presences of social media, mobile usage, and BYOD
- » Looking to the future with intelligent data and proactive decision making

# Chapter 1

# From Then to Now: The Evolution of Information Archiving

**T**echnological innovation is driving business forward once again at an amazing rate of change. Technology is changing how businesses operate and how we work and play in a way not seen in at least a century. Not only do these technological changes affect the way we do business, but also they bring along with them changes in the way information is disseminated, retained, and accessed for later use. The arrival of social media, mobile collaboration, remote workers, and bring-your-own-device (BYOD) policies has created new challenges and opportunities to businesses when it comes to the information they must archive.

When you think of information archiving, typically what may come to mind is rooms filled with filing cabinets that contain important documents that you might need for future use. In your personal lives what may come to mind is keeping seven years' worth of tax return information just in case the Internal Revenue

Service (IRS) decides to audit your tax returns. The IRS never forgets! Businesses also are required to keep important information around for many reasons such as tax and regulatory compliance, employee performance evaluation, and as a defense in case of litigation by employees, vendors, customers, or government agencies. In recent years, increased government regulation, such as the Health Insurance Portability and Accountability Act (HIPPA), Dodd-Frank, and industry standards such as the Payment Card Industry (PCI), increasingly govern how and what information is archived. Information archiving is simply the process used to retain important information in case it's needed for future use for any of these reasons.



The word *archive* comes from the Greek *arkheia*, meaning “public records.” Its meaning is little changed today. Archives are records that are retained for future access, oftentimes for compliance with government laws and regulations.

## The Evolution of Information Archiving

In the past before the arrival of computers and the Internet, businesses kept their important information in paper form in rooms filled with filing cabinets and possibly on microfiche for future retrieval. By the late 20th Century, information archiving evolved to a point where Information Technology (IT) departments routinely filled large racks of computer storage with electronic documents, emails, and instant messages — all of which were entirely disseminated, archived, and retrieved solely within corporate networks. Because archiving's roots lie in making corporate communications accessible, searchable, and efficiently managed, it followed that email, one of the first digital means of communication in the corporate world, would be its primary focus. Many in the information archiving industry, including IT, even prefixed the term archiving giving rise to the term *email archiving* as a topical area of information archiving.

The original challenges around regulatory compliance and litigation protection brought about some key stakes and helped introduced advanced features in the marking, including the following:

- » Comprehensive Electronic Discovery (e-Discovery) management that can search different kinds of data with equal efficiency and insight
- » File classifications (with inheritance) that allow the user to manually call out specific types of files or flag others for review, increasing the efficiency of human intervention in the archiving process
- » Storage management solutions, including the potential for off-site storage



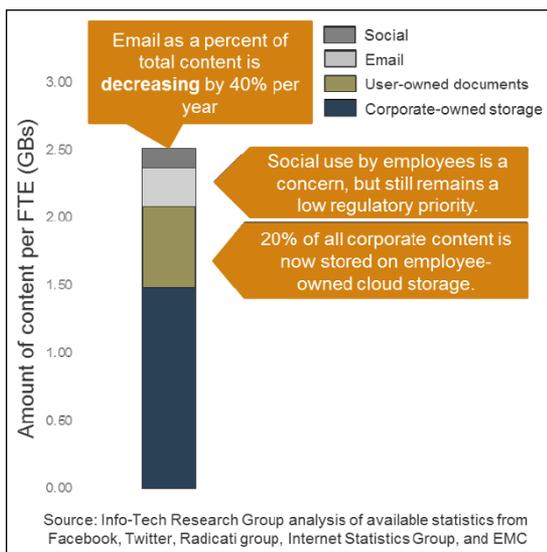
REMEMBER

Storage management represents a continuous challenge as the volume of data increases exponentially, requiring off-site storage that's as equally secure as onsite storage. Although data storage has become a commodity, it's still not an infinite resource so the disposal of unneeded and irrelevant information is an important concern.

As archived data evolves away from solely email communications, data storage requirements continue to grow exponentially, making the consideration of both storage and disposal components of a successful archiving strategy. In fact, beyond retention and disposal, there's an emerging opportunity for drawing real insight out of the wealth of content and communications being managed by archiving solutions. Figure 1-1 illustrates the decreasing percentage of total content that's made up of email.

## E-DISCOVERY

*Electronic Discovery* (also called *e-Discovery* or *eDiscovery*) is any process in which electronic data is located, secured, and searched with the purpose of using it as evidence in civil or criminal litigation. e-Discovery can be carried out off-line on a particular computer, or it can be done via a network. Court-ordered or government-sanctioned hacking for the purpose of obtaining critical information for a case can also be considered a form of e-Discovery.



**FIGURE 1-1:** Email is declining as a percentage of corporate communications.

## Social Media, Mobile Collaboration, and BYOD Policies

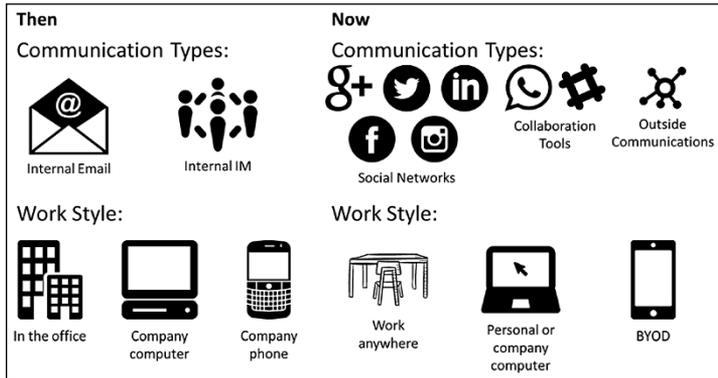
The preeminence of instant messaging systems (Skype for Business, Jabber, Slack, and others) and social media (Facebook, Twitter, Instagram, and LinkedIn) in the past decade have created entirely new sources of corporate communications data that need to be leveraged as part of a company's information archiving strategy. These media channels require a much less specific, multichannel approach to archiving, leading to a broadening of the market to content archiving.

Social media networks were one of the first key media of corporate communications that take place outside of the corporate IT infrastructure, as social media data reside on infrastructure owned entirely by the social media provider. Companies must find a way to incorporate these communications into their content archiving strategy.



You may be tempted to write off social media as just another form of open-ended communications, much like internal Instant Messaging (IM) systems, but you do so at your peril. Social media is unregulated by many corporate networks, which leaves open the potential for security breaches and damage to the company's reputation. In addition to these new collaboration technologies, many companies have put in place BYOD policies that allow their employees to access corporate networks and communications channels from their personal devices, such as computers, phones, and tablets that have exacerbated the challenges companies face with archiving.

Figure 1-2 illustrates the past and present situation facing archiving.



**FIGURE 1-2:** The evolution of corporate communications.

As you can see in Figure 1-2, corporate communications have moved from email and chat on company-owned networks and devices to a multichannel model largely taking place outside of company-owned networks and on employees' personal devices. The great challenge facing business is coming up with a strategy that can unify these channels of communication into a simple, secure, and easily accessible archiving solution.

For historical data, the solution often looks a lot like a data warehouse — a central location where multiple data sources are brought together through Extract-Transfer-Load (ETL) or other integration tools.



ETL is a process to extract data, mostly from different types of systems, and transform it into a format that's more appropriate for analytics and reporting, and finally loading it into a database or cube(s). Common types of systems from which data are extracted are Customer Relationship Management (CRM) applications, financial applications, Enterprise Resource Management (ERP) applications, and other types of communications applications.

Data can be migrated from the individual systems (mail server databases, collaboration servers/back-end databases) regularly and stored in a unified manner. In the context of corporate communications, however, the constant flow of additional communications make the batch-load model just one avenue for extracting analytical insights from corporate communications. It may also be necessary to capture data closer to the source, but even that data will need to be consolidated and architected with some uniformity to drive real-time insights.

After the data is compiled into a logical model, the next question becomes how to make the data rationally searchable. Information is most easily searched when it originates and lives in corporate networks (a reality that no longer exists). Even if multiple layers were added (for instance, internal IM or texting on corporate devices), the information could be formatted in a way that it shared the same foundation or could at least all understand each other in a common storage space. The traditional data models have been disrupted by the influx of unstructured data, requiring non-relational databases to be integrated into the data architecture alongside the traditional, structured Relational Database Management System (RDMS).



Today's business environment typically uses two types of databases. Relational databases, also known as RDMS, are digital databases whose structure is based on the relational model of data that organizes data into one or more tables or "relations" with a unique key identifying each row or "record." Generally, each table or relation represents one type of data (such as customer or product). The rows represent instances of that type of data — for example, a customer's or product's name — and the columns represent values attributed to that instance, such as a customer's address or product's price. Data stored in a relational database are accessed, stored, and manipulated using a technique called Structured Query Language (SQL), which is a highly specialized language for representing relational data. Relational databases are

traditionally stored on servers in a company's data center and are accessed via a corporate network, but there are RDMS solutions available in cloud platforms such as Amazon Web Services (AWS).

Non-relational databases are those in which data are stored in a more ad-hoc fashion such as in document form, key-value pairs, graphs, or wide columns. Non-relational databases have become very popular in recent years because of their simplicity of design and the ability for "horizontal" scaling to clusters of machines (which is difficult for relational databases) and a finer control over availability. The arrival of cloud computing has led to the growing popularity of non-relational databases because of the scaling demands of cloud-based applications and cloud architectures, which replicate data across clusters of machines stored in the same data centers or in centers scattered throughout the world.

Figure 1-3 illustrates the required searchability of data sources in the past and present.

Required Searchability of Data Sources		
Data Sources:	Then	Now
Corporate Owned Networks	Yes	Yes
Social Media	No	Yes
External Collaboration Tools	No	Yes
Personal Employee Devices	No	Yes
Public/Home Wi-Fi Networks	No	Yes

FIGURE 1-3: The required searchability of data sources.

## Social Media in the Workplace

A majority of companies now use social media for business purposes. For most firms, this growth is driven from acceptance by senior management, and this acceptance varies between internal and external social media. Most organizations today already agree that social media is essential for externally facing activities, such as marketing, customer service, and customer interactions and that it gives companies a great opportunity to push their ideas, content, and brand further than ever before. Countless companies have proven that a strong outward-facing social media presence can create a strong brand and a community that rallies around that brand.

In contrast to its external counterpart, not all companies openly embrace using social media for internal business functions, such as collaboration and communication between employees. According to Osterman Research, there is a widespread perception that Facebook and Twitter are used by employees to waste time in non-productive work such as viewing the latest cat video or keeping up with their favorite celebrities, while LinkedIn is often used by employees to network so they can find a better job. Consequently, many decision makers haven't yet been presented with a strong business case for the adoption of enterprise-grade social media.

While this is a valid concern, to pass off internal social media as useless is to forfeit all the benefits that it can offer. As decision makers become more aware of the benefits of using social media tools for decision support, expertise discovery, and intra-company communications, more companies will embrace social media in their workplace.



TIP

Consider this: If decision makers were willing to view social media tools as an integral component of their larger corporate culture, they could create an environment where users could improve project communication, collaborate more often, and enhance the quality of corporate decisions. The speed and quality of customer service could also improve. These tools could provide a means of information sharing and gathering that was simply not possible, or simply not as efficient, as other corporate tools. When managed properly, these communication methods can also provide a competitive advantage to the organization. Social media has a great potential to create a sense of community and affirmation for employees, business partners, and others in virtually any organization. This lends credence to the notion that enterprise social software and services would become a large market. Two case studies done in recent years back up this idea:

A 2015 study by Pew Research Center showed that

- »» 20 percent of workers have used social media to gather information to solve work-related problems.
- »» 12 percent asked work-related questions to people inside and outside of their organization.
- »» 17 percent used it to build and strengthen relationships with coworkers.

» 56 percent believed that social media helps their job performance, while only 22 percent believed that it hurts. The rest either felt it didn't have an impact or felt it's both an advantage and disadvantage.

A 2016 study of business social media use in the European Union showed similar results. It reinforced the fact that, while social media's main use in business is branding and marketing, other uses are on the rise. Figure 1-4 illustrates the trend of increasing use of social media in business.

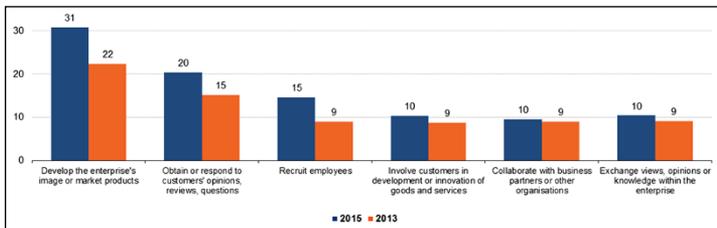


FIGURE 1-4: Trends of social media use in business.

## The Future of Archiving in an Integrated Data World

Even if the data can be rationalized into connected data marts, or into a single data warehouse, initiating a detailed search can still cost tens of thousands of dollars where custom parameters are required. Combine those search costs with the constantly increasing costs related to the data storage, and archiving starts to look like a major cost sink in IT's budget. There is, however, an opportunity to shift the perception of the archive away from being a money pit and prove that there is value beyond regulatory audit or litigation. By reframing e-Discovery as a powerful tool that can unlock insights across the organization on an ongoing, proactive basis, rather than as a reactive defense mechanism, IT can position archiving as a function that increases a company's bottom line.

Like archiving, e-Discovery has evolved beyond its value proposition as a static, point-in-time solution, only exercised in rare, but very serious situations. The content indexing, searching, and reporting capabilities are now being used to unlock insights out

of corporate information stores in real time. With access to information contained in not only emails but also social, mobile, collaboration, and IM networks, there is now potential to maintain a constant pulse on all communication channels.

The door to true insight generation is being opened by four emerging benefits of e-Discovery:

- » An analytical engine that can mine large quantities of communication data
- » A predictive tool that flags budding issues and prompts early intervention
- » A fluid decision-making tool that offers a data-backed perspective for business decision makers
- » A data source to provide key insight into organizational communication, both internally and externally

This process can not only automate human work (which reduces costs and increases the efficacy of the data), but also it offers a foundation of analytics that can identify problems that humans might miss due to its ability to seamlessly wade through multiple sources of data.

## IN THIS CHAPTER

- » Preparing for the possibility of litigation
- » Mitigating risks faced by the Chief Compliance Officer
- » Ensuring that the Chief Security Officer can keep data safe
- » Facing the challenges of being a Chief Legal Officer
- » Complying with Human Resources regulations

# Chapter 2

## What Keeps You Up at Night?

In this chapter, you look at the challenges that keep business leaders up at night. The increasingly litigious society and ever-growing government and professional regulations leave businesses increasingly exposed to costly litigation and punitive measures taken by government for regulatory non-compliance. Here, you focus on the possibility of litigation and the challenges faced by the Chief Compliance Officer, Chief Security Officer, Chief Legal Officer, and Human Resources.

### Will My Business Be Involved in Litigation?

Litigation is a real problem that your business must be prepared to handle. Today's overly litigious society requires that all businesses change their mindset regarding litigation from, "Will my company ever be sued?" to "If our company is sued, how prepared will I be to handle it?"

A study by the Small Business Administration shows that around 36 to 53 percent of all small businesses are involved in litigation every year. Another, study by Norton Fulbright (who conducts an annual survey on litigation trends) shows that 90 percent of all businesses, at one point, are involved in litigation.

To be prepared for litigation, you must first know the risks involved. Another litigation trends survey by Norton Fulbright reveals the following:

- » 71 percent of all companies surveyed spent more than \$1 million just on the costs of litigation.
- » 32 percent of smaller companies spent \$1 million or more on litigation legal fees (not including the cost of settlement or judgments).
- » 42 percent of medium-sized companies spent between \$1 million and \$5 million on litigation in 2012.
- » 43 percent of large companies spent over \$10 million on litigation expenditures.

Those are some huge costs spent simply on litigation! Why, you may ask, is litigation so expensive? When looking further into the costs involved, it becomes apparent the huge role that e-Discovery plays. The exact cost of e-Discovery to the U.S. is difficult to pinpoint, but Logikcull.com estimates, after researching dozens of sources, that it could be as high as \$44.64 billion annually. To put that in perspective, if the costs of U.S. e-Discovery were its own nation, it would rank 90th out of 189 countries.

As seemingly expensive as it can be to manage e-Discovery, mis-managing it can be catastrophic and much more costly. Did you know that more e-Discovery sanctions were awarded in federal cases in 2009 than in all the years before 2005 combined? This trend of increasing e-Discovery sanctions shows no signs of slowing down. As times change, litigation changes too, and companies must be prepared to handle that. The notion that e-Discovery is solely and mainly linked to email is outdated, as mobile and social media communications are playing a more important role in court every day. Health Insurance Portability Accountability Act (HIPAA) regulations, Sarbanes-Oxley (SOX) requirements, Financial Industry Regulatory Authority (FINRA), Health Information Technology for Economic and Clinical Health Act (HITECH Act), and many other protocols demand that *all* communication data be

archived and immediately accessible. This information includes archiving mobile device messages, as well as archiving your employees' social media messages.

The same litigation trends survey illustrates this point, as 41 percent of survey respondents were required to preserve and/or collect data from an employee's mobile device for litigation or investigation. In larger companies, more than half confirmed preserving mobile device communication data for e-Discovery. Other impacts of lawsuits on a company are reputation, time, emotional and physical tolls, and limiting the progress a company makes, among others. These risks can be mitigated by having a dedicated legal team in place that can expertly manage these situations for you when they arise. Having this team will be a huge asset to you, but they're going to need the right tools to effectively manage the situation and save you time and money.



REMEMBER

Litigation is a burden for all parties involved and should be avoided whenever possible. If it can't be avoided, your company must be prepared to produce all electronically stored information (ESI). This includes archiving all electronic communication such as email, social media, and even archiving text messages. To produce this data for e-Discovery, you must first archive and preserve your company's communication data.

Sound communication policies and a knowledge of industry-specific regulations create a strong foundation for your business to not only survive but also thrive in a litigious and highly regulated climate. You can find information on these regulations by going to [www.microfocus.com](http://www.microfocus.com) and clicking on your industry. Other measures such as creating a sound company mobile and social media policy can help drastically reduce the chances of being involved in a scandal. Even after all these measures have been implemented, you must capture and manage this important data. So how will you manage it?

Litigation can be a scary concept. If it's happening to 36 to 53 percent of businesses yearly, and 90 percent of businesses over their lifespan, it's very likely to happen to you. The best advice to follow is to be prepared. Make sure that you are well informed about regulations and have policies in place to help you follow them. With an expert legal team equipped with a quality archiving solution, you can rest assured that, while litigation may come your way, it won't have the deadly impact on your business that it has had on others in the past — simply because you are prepared for it.

# Looking at the Top Concerns of the CIO and the IT Director

Your IT Director and team, which certainly includes your Chief Information Officer (CIO), are being pressured like never before to address requirements from departments across your business, despite your lack of resources and rising costs. These departments and their demands can include the following:

- » Compliance requirements force you to evaluate Personal Storage Table files, or PST (Microsoft's proprietary file format to store copies of messages, calendar events, and other items within Exchange and Outlook), consolidation and data life cycle management concerns.
- » Legal requires you to provide e-Discovery of electronic communication and requests the ability to audit, export, and manage the data.
- » Employee requests increase as your team spends hours trying to find lost and deleted email.
- » Human Resources requires that you provide employee policy provisions and communication oversight and that you help prevent potential employee misconduct on your network.

All this means that your top priorities include reducing the strain on your IT department by consolidating PSTs and establishing data life cycle policies, educating employees on how to avoid risk, and empowering them with tools to rely less on IT. It also includes providing each department with the ability to quickly access, search, perform e-Discovery, and export your archived communication data without the need for IT, as well as establishing automated employee policy provisions and immediate violation alerts to mitigate risk.



REMEMBER

Based on the National Association of State Chief Information Officers (NASCIO) survey, the top concerns for the IT Director are as follows:

- » **Lack of IT resources:** Free up IT by enabling your legal team, auditors, and other named users to independently conduct complete case assessment, e-Discovery, and data export without the need for IT assistance.

- » **Increasing hardware and maintenance costs:** Extend the life cycle of your existing hardware investment by reducing data storage needs and the total number of servers needed to support your organization.
- » **PST consolidation:** Consolidate PST files to one searchable location and eliminate the need for PST file creation.
- » **Data life cycle management:** Create specific retention policies for all electronic communication, including email, social media, IM, and mobile communication data.
- » **Ease of e-Discovery/audit export:** Easily export, redact, and encrypt communication data onto a flash drive, DVD, PDF, PST, or stand-alone archive viewer.
- » **Management of organizational communication data:** Capture and comply with requests to utilize email, mobile, and social media communication data.
- » **Employee requests:** Allow employees to find their own archived data quickly and effortlessly by providing them a Google-like search for all email communication, social media, IM, and mobile message data from one location.
- » **Employee policy provisions:** Educate employees on policies and how to avoid potential risks to themselves and the organization.

## BUSINESS CASE

A major hospital in Boston, Massachusetts, was challenged by ever-increasing legal fees and the time-consuming process of accessing electronic communication data across the organization.

The hospital implemented a unified archiving solution and was able to see an immediate return on investment (ROI) through reduced costs and a reduced burden on IT. The hospital empowered its employees by enabling them to access their communication data directly in the archive. By doing so, the hospital significantly reduced the amount of time and resources IT previously spent finding lost or deleted email. The hospital estimated that an average of 22 hours per week had been saved from searching for lost email alone. After implementation, the archiving solution provided the legal teams direct access to all the

*(continued)*

(continued)

hospital's electronic communication data. This access enabled them to quickly access the information and do a complete case assessment, e-Discovery, redaction, and data export without having to wait for assistance from IT — or continuing to go back to IT when data was missing.

The hospital estimated an average savings of \$26,000 per week in legal fees after implementing this solution. Archiving also brought the hospital into compliance with HIPAA and HITECH data security requirements. It ensured that protected health information (PHI) content was kept confidential and secure, and that it wasn't shared by doctors, nurses, or other staff through social media or mobile communication. The archive allowed the hospital to have oversight on all electronic communication data, which not only helped eliminate inappropriate or harmful content but also reduced the risk of litigations costs by an estimated 23 percent.

## Mitigating the Risks Facing the Chief Compliance Officer

With the recent influx of additional SEC scrutiny, fines, and enforcement targeting the Chief Risk/Compliance Officer (CRCO), it's now more critical than ever before to ensure that your organization is compliant and prepared. At the heart of a Compliance Officer's concern is the pursuit of enforcement actions under what is called the "Compliance Rule," or Rule 206(4)-7 of the Investment Advisers Act. This rule requires that registered investment advisers adopt and implement written policies and procedures designed to prevent violations. This means you need to not only create and enforce policies, but also you must be prepared with a response if an enforcement audit arises, thereby mitigating your risk of violations and fines.



REMEMBER

Based on the NASCIO survey, the top concerns for the Chief Compliance Officer are as follows:

- » **SEC heightened regulations:** Create and enforce policies that help you to be prepared if an enforcement audit arises.
- » **Policy enforcement:** Capture and monitor policy-violating communication, including email, mobile messaging, and

social media. Ensure employees aren't sharing inappropriate or policy-violating content.

- » **Being prepared for audits:** Empower administrators, auditors, and authorized users to perform essential functions, including regulatory searches and litigation holds, as well as to print, forward, save, redact, and export data.
- » **Risk mitigation:** Reduce the risks of potential violations before they occur within email, mobile data, social media by monitoring and archiving communication in one central archive.
- » **Compliance:** To meet compliance retention standards, organizations must securely archive email, social media, and mobile communication data all in one central location, plus prohibit message alteration or deletion, and be able to quickly access, search, and export the archived data.

## BUSINESS CASE

A major law enforcement authority in the United States was recently subpoenaed by the Department of Justice (DOJ) in connection to a high-profile case. The DOJ required this organization to produce all its case-related information, including email, mobile data, and social media data for specific employees involved in the case for the previous seven years. The challenge to complying with this request was that the DOJ required this organization to deliver all the communication data in just seven days.

Fortunately, this agency already had a unified archiving solution in place that enabled it to easily retrieve the data and provide it to the DOJ within the seven-day window. The communication data helped the DOJ to both support and disprove specific aspects of the case. Without the proper solution in place, this type of request in the short amount of time would have been nearly impossible to accomplish. In the past, this organization spent months trying to sort through employees' locally "archived" PST (Outlook Personal Folder) files, from which the company could only produce a fraction of the required data. The results? Only email communication data. Now, at a moment's notice, it can search and export all its employee communication data quickly, easily, and in a simple-to-use format.

# Ensuring the Chief Security Officer Can Keep Data Safe



WARNING

Your organization is being threatened like never before. Email, social media, and mobile communication data provide easy avenues for security risks and compliance violations. These media also facilitate data leakage of sensitive or proprietary organizational information and can allow employees to post inappropriate or malicious content.

A proactive solution can help you mitigate risk by educating your employees on what to avoid when using email, social media, and mobile devices. A proactive solution can also help preserve and protect your business data, while providing users with easy access to their archived data. By implementing this type of solution, you and your organization are protected and can maintain compliance.



REMEMBER

Based on the NASCIO survey, the top security concerns are as follows:

- » **Security risk mitigation:** Mitigate security risks and avoid compliance violations by securely archiving email, social media, and mobile communication data all in one central location, allowing instant access to search and export the archived data.
- » **Data preservation:** Create specific life-cycle retention policies within your system to securely capture and preserve all electronic communication data. Manage the data based on policies with set time parameters to ensure the information isn't altered or deleted.
- » **Business data protection:** Communication data must be preserved within an encrypted database and stored in a secure location. This can be either behind the corporate firewall or in a certified cloud with redundant and secure data centers.
- » **Ease of data access:** Allow administrators, auditors, legal, and other authorized users to access communication data from a web browser with the ability to perform regulatory searches, litigation holds, printing, forwarding, saving, redacting, and exporting functions with the built-in e-Discovery tools.
- » **Protection from reputation damage:** Restrict malicious or inappropriate message content and prevent sensitive data from leaving your organization. Monitor, filter, block, and archive all email, social media, and mobile communication data.

## BUSINESS CASE

A financial services corporation from New York, New York, was concerned about maintaining compliance after several employee violations. It implemented a unified archiving solution that allowed it to set up policies that monitor social media accounts for certain keywords and terms. After a violation occurred, an alert was sent to the network administrator.

After the organization implemented the solution, it could quickly identify the employees who were placing the organization at risk and were able to block further violations. From there, it was very easy for the legal team to put together a complete case assessment of all the individuals involved in the violations. By blocking the damaging content, it prevented inappropriate messages from being posted or shared online, ensuring that sensitive data did not leave the organization. Since the solution was implemented, no policy violations have occurred, and of the attempted violations, zero have been successful. This solution has kept the organization's information safe, secure, and completely compliant with all FINRA and Federal Rules for Civil Procedure (FRCP) rules.

## Keeping It Legal: Challenges Facing the Chief Legal Officer

Your organization must have the ability to respond to information requests, case assessments, and litigation at a moment's notice. Your legal team needs to be able to quickly access, search, and perform e-Discovery on your archived communication data and must provide organized and accurate reports that can be exported in an easy-to-use format.



REMEMBER

Based on the NASCIO survey, the top concerns for the Chief Legal Officer are as follows:

- » **Expedited information requests:** Provide your legal team with access to all communication data when an expedited information request is received. The team can access one central archive for all email, social media, IM, and mobile messaging data. There's no need for placing a request with

IT. Direct access to the data means that your organization can meet expedited time restrictions and can export and redact the data in a usable format.

- » **Complete case assessment:** Authorize management, individuals, or legal teams to perform complete e-Discovery and case assessment audits without the need for IT involvement. These can be performed within an easy-to-use interface that shows all communication data across the organization in one location.
- » **Litigation readiness:** Empower your legal team to prepare for litigation, or open records requests with direct access to the data. They can place litigation holds, perform e-Discovery searches, print, forward, save, restore, export, and redact in one central location.
- » **Access and search data:** Allow named users to easily access all communication data from a web browser, and use the Google-like search function to access all electronic communication in one central location.
- » **Communication data export:** Export data with a flash drive, DVD, PDF, PST, or the stand-alone archive viewer.

## BUSINESS CASE

Due to significant increases in expedited information requests, a major legal firm in Los Angeles, California, worked with its clients to implement an organization-wide solution, within each client site, to preserve electronically stored information (ESI). The original driver for this project was to meet the recently updated guidelines of the United States Federal Rules of Civil Procedure (FRCP). This law requires that all electronic communication data, including email, social media, and mobile communications, be preserved “. . . in the anticipation or conduct of litigation.” Failure to preserve and produce ESI during the discovery process can result in sanctions or dismissal of the action. Client communication data must be produced not only in an electronic or printed format, but also it must be provided in a mutually agreed on and readable format.

As the firm’s clients began to implement this solution, they saw immediate results. When clients received an information records request,

they submitted it to the law firm. The law firm had specific administrator rights, accessed the client's archive system, performed e-Discovery, compiled the report, redacted as necessary, and exported it. This enabled the law firm to do complete case assessments, deliver complete reports on a specific issue or employee, and ensure its clients were ready for litigation. Each report included all employee communication in email, mobile, social media, search, and IM data that helped to prove or disprove their case. These reports also eliminated the need for the legal firm to request information from the client's IT department or to have to work with anyone within the client's organization.

This solution became a win-win for both the law firm and its clients. On average, the law firm could reduce response times for information requests by 60 percent and enabled its clients to meet the expedited time restrictions set by the court. This also helped the law firm to focus resources on more pressing issues and to add new clients. As a bonus, the firm's clients who implemented the solution saw an immediate reduction in the burden on its IT department to respond to information requests. Each client also saw an average reduction in legal fees by 26 percent. In the end, the law firm found that it had increased client retention from 76 percent year over year, to 99 percent. So, by saving clients money, the firm also increased its bottom line.

## Complying with Human Resources Regulations

Human Resources (HR) includes many moving parts, involving complex issues that you need to address in any given day. Managing employee benefits, retirement plans, grievances, compliance issues, and harassment claims are just the beginning. The latest hidden threat to HR is employee use of email and social media to transmit any message at any time. This has created an environment where it seems impossible to track who says what, to whom, and when. It has become essential to securely monitor and retain every business conversation, contract, and commitment. In addition, you should have complete communication oversight into what your employees are discussing to ensure policy enforcement.

Be aware of what your employees are texting, what they're posting on social media, and what they're saying via email. This is where implementing a software solution that provides complete

communication oversight, policy enforcement, employee case assessment, message retention, and protection from reputation damage can resolve these issues.



REMEMBER

Based on the NASCIO survey, the top concerns for Human Resources are as follows:

- » **Communication oversight:** Execute a search of all archived communication data for keywords to gauge the tone and theme of employee communication. Set up alerts for keywords and phrases that violate policy. Monitor and archive social media content.
- » **Employee policy enforcement:** Ensure employees aren't sharing inappropriate content or transmitting policy-violating information. Establish communication policies and enforce them with keyword alerts, monitoring, filtering, and blocking.
- » **Employee case assessment:** Allow authorized individuals or legal team members to perform complete e-Discovery and case assessment audits without the need for IT involvement.
- » **Protection from employee violations:** Prevent users from posting inappropriate or policy-violating information in social media by monitoring and archiving communication data.
- » **Prevent internal harassment:** Prevent harassment, bullying, and other inappropriate content by having oversight of electronic communication by using keyword alerts and filters.

## IN THIS CHAPTER

- » Discovering the drivers for information archiving
- » Learning new types of content that must be archived
- » Considering archiving for the long term

# Chapter 3

## The How and Why of Information Archiving

In this chapter, I help you dig further into why information archiving is vital and how companies can use information archiving to achieve their goal of preparing for possible litigation and regulatory compliance.

### The Drivers of Information Archiving

There are a variety of reasons that organizations should archive their email, although the specific reasons to do so — and their relative importance — will sometimes vary significantly from one organization to the next based on many factors. These factors include

- » The regulatory environment in which an organization operates
- » The legal risks an organization faces
- » The overall level of risk that senior decision makers are willing to accept
- » The willingness of IT to implement user-focused capabilities for recovering email

There are five primary drivers that decision makers should consider as they plan their archiving strategy.

## Litigation

For most organizations, the most important reason to implement email archiving will be the litigation environment that an organization faces. Specifically, litigation-related drivers focus on three basic capabilities:

- » **Early case assessment:** Many decision makers, when they believe that their organizations might somehow be involved in a legal action, will want to conduct an early case assessment to determine the risk they face in either defending themselves or prosecuting the case.
- » **Legal holds:** Legal, or litigation, holds involve retaining all relevant content when decision makers reasonably believe that litigation might be forthcoming, even if no formal legal action has yet occurred. For example, in a wrongful termination case, if decision makers reasonably believe that such a case will be initiated, all relevant emails and other documents must be preserved until the legal action has been settled. An archiving system, in conjunction with appropriate retention policies, is extremely useful in enabling legal holds.
- » **e-Discovery:** e-Discovery is the formal process of searching for, extracting, producing, and reviewing relevant information from email or other data stores based on court orders and/or other rules established during the process of litigating a case. An archiving system that can index, store, and enable search of relevant content — all while protecting the integrity and the authenticity of the stored data — is a key enabler of e-Discovery.

## Regulatory compliance

Another important driver for archiving that is somewhat akin to the litigation driver is regulatory compliance. While organizations in all industries face some level of regulatory compliance obligation that requires retention and production of business records, some industries face strict and sometimes onerous regulations. These include the financial services industry, healthcare, pharmaceuticals, energy, and certain others.

For example, in the United States the communications of registered representatives and others that sell securities or provide financial advice must comply with Securities and Exchange Commission (SEC) and Financial Industry Regulatory Authority (FINRA) requirements to retain relevant emails, instant messages, and social media posts. Healthcare organizations must comply with various United States government rules focused on retaining patient records. Energy-related companies must comply with retention obligations imposed by the Federal Energy Regulatory Commission.



REMEMBER

Even supposed “non-regulated” industries, such as retail, manufacturing, and so on, face some level of regulatory obligation to protect business records. Consequently, decision makers in all industries must consider regulatory compliance as a reason for implementing an archiving capability.

## Storage management

Another important reason to implement an archiving system focuses on the functional benefit of reducing storage on “live” servers. For example, if an organization allows each user to have a one-gigabyte mailbox and each email server supports 1,000 users, that means that each email server will potentially need to store one terabyte of mailbox data. Backing up such a large amount of data can take a substantial length of time, not to mention the performance degradation that might result from managing so much content. Moreover, if a server crashes because of a failed hard drive, a patch that doesn’t work as it should, or some other fault, restoring up to one terabyte of data onto the server will take a substantial length of time and can result in an unnecessarily long system downtime.

Alternatively, if an archiving system is implemented that will automatically migrate data to archival storage once a mailbox reaches a certain size, it can do two things:

- » It can implement much smaller mailbox quotas (perhaps 250 megabytes instead of one gigabyte).
- » It can give users access to their archived content directly in the mailbox or through a web-based interface. This will not only improve email server performance but also will dramatically shorten backup and restore downtimes, with important and positive implications for disaster recovery and business.

## Knowledge management

Another important reason to implement an archiving solution is to preserve the content that organizations pay employees to produce. An email system, for example, contains a record of communications with customers, prospects, business partners, and others; it contains records of appointments, contacts, and tasks generated by each user; and it contains a record of an organization's "digital heritage." Consequently, organizations should implement an archiving capability to preserve this information for use in the future.



REMEMBER

Few organizations will ever implement an email archiving system with knowledge management as the primary driver in the decision process. However, it's an important secondary or tertiary driver and "nice to have" if implementing archiving for regulatory compliance or legal reasons, for example.

## End-user and IT productivity

Implementing an archiving capability to improve the productivity of both end-users and IT is also important. Organizations that implement archiving and then give their users access to archived content enable them to recover their own missing, deleted, or older email without having to ask IT to do this for them. This enables individuals not only to recover their own email more quickly, but also it makes IT personnel more efficient because they don't have to respond to these types of recovery requests or tell users they don't have the time or resources to do so.

The ability to access emails quickly is a key consideration in the selection of an archiving capability because most users employ email more than any other application. For example, Osterman Research has found that the typical employee sends and receives 110 emails per day. That means that in an organization of 2,500 email users, roughly 17.9 million emails will be sent or received every three months. If even a small portion of this enormous amount of content must be recovered periodically, an archiving capability can make both end-users and IT much more productive by speeding access to this material.

## What Content Must Be Archived?

The focus of archiving has traditionally been email archiving — and for good reason:

- » Email is where the typical information worker spends roughly 30 percent of her time. For example, an Osterman Research survey of end-users found that the typical email user spends 149 minutes per workday doing something in email, making it the primary communications platform for most users.
- » Email is the primary file transport mechanism in most organizations and contains a large proportion of the typical organization's intellectual property and other content. Twenty-five percent of all emails contain attachments of some kind — 3 percent of them are larger than five megabytes. The result is that about 98 percent of the bits that flow through email systems are attachments, not the emails themselves.
- » Email is the system of record for how employees spend their day, containing information on appointments, contacts, tasks, interactions with clients and business partners, and a wealth of other information that can be critical for legal or regulatory purposes.

## The need to produce content

Osterman Research has found that most organizations have been required to produce various types of electronically stored information as part of legal actions and regulatory audits, with employee email being the most commonly requested type of information. Organizations have also made use of their own archives and backup tapes to determine which course of action to take in legal cases. Figure 3-1 illustrates the types of content survey respondents indicate they have been required to produce.

Capability	%
We have been ordered, as part of a legal action, to produce employee email	65%
We have used archived content for pre-discovery purposes (i.e., to determine in advance whether or not to settle or fight a lawsuit)	53%
We have referred back to our content archive or backup tapes to support our innocence in a legal case	43%
We have been ordered, as part of a regulatory audit or similar event, to produce employee email	33%
We have been ordered, as part of a legal action, to produce employee instant messages	14%
We have been ordered, as part of a legal action, to produce employee social networking content (e.g., employee Twitter or Facebook posts)	13%
We have been ordered, as part of a regulatory audit or similar event, to produce employee instant messages	13%
We have been ordered, as part of a regulatory audit or similar event, to produce employee social media content (e.g., employee Twitter or Facebook posts)	10%

**FIGURE 3-1:** Content management and production incidents.

## New content types that must be archived

The traditional archiving paradigm is changing. Partly as a result of amendments to the Federal Rules of Civil Procedure in 2006, which expanded the envelope of what could be included in e-Discovery, and because of the growing number of non-email tools available for information workers to share communications and content, the concept of Electronically Stored Information (ESI) has expanded to include a wide range of data types, such as instant messages, files, social media content, and even voicemail.

Because email is but one type of ESI, but by no means the only type of electronic content that might be relevant in legal or regulatory actions or that might be useful for other purposes, other electronic content should also be retained.

To be sure, email content continues to remain the most important single type of content that must be retained in most organizations. However, financial services firms have had to archive instant messages since 2003 and social media content since 2010, and this trend is slowly expanding to include other industries, as well.

## FEDERAL RULE OF CIVIL PROCEDURE

Additionally, a new version of the Federal Rule of Civil Procedure went into effect December 1, 2015. Subsection 37(e) replaces the previous subpart in its entirety and features a new title: "Failure to Preserve Electronically Stored Information." In addition to this amendment to the previous rule, Rule 37(e) is accompanied by official Committee Advisory notes that clearly call out counsel to preserve clients' ESI, and that counsel should ". . . become familiar with their clients' information systems and digital data — including social media — to address these issues." The implication of the new law is clear: Social evidence is given at least as much equal weight and importance as other forms of ESI, such as email and documents.

Check out the full text of the Federal Rule of Civil Procedure at [www.law.cornell.edu/rules/frcp/rule\\_37](http://www.law.cornell.edu/rules/frcp/rule_37).

# Archiving for the Long Term

The evolution of electronic information that business exchanges will only continue to expand requiring your archiving strategy to evolve right along with it. In this section, you take a look at some things to consider as you plan for archiving for the future.

## Migrating from one archiving system to another

An important consideration in the development of archiving is the periodic need to migrate from one on-premises archiving system to another, from an on-premises system to archiving in the cloud, or even from one cloud provider to another. Osterman Research believes that the replacement market for archiving will continue to grow as earlier generation archiving platforms are migrated to higher capacity, more scalable or higher performance systems to meet more stringent archiving requirements.

## Key issues to consider

As organizations consider their long-term archiving requirements, there are four key issues that they must evaluate, both for their current platform(s) and for any replacement or substitute platforms they might be considering.

### Performance

Performance is key in any archiving solution, particularly for very large archives. Say a 2,500-user company that generates 110 emails per user per day has only 15 percent of those emails containing business records or other relevant information that need to be archived. Further, assume that the organization needs to retain its information in the archive for an average of seven years.

At the end of seven years, that organization would have 75.1 million emails in its archive, assuming it had an email archiving system that provided single-instance storage and thereby eliminated duplicate emails and files. Moreover, because the average email is 0.42 megabytes, the total volume of content archived would exceed 31.5 terabytes. If 20 percent of emails required retention, these figures would jump to 100.1 million emails and 42.0 terabytes of storage.

Archiving systems need to be evaluated based on their performance — their ability to search through very large data stores and return relevant results in a short amount of time. Some older archiving solutions aren't capable of delivering this type of performance and so increase the cost of e-Discovery and other searches for content in the archive.

## **Scalability**

Closely related to the performance of an archiving solution is its scalability — the ability of the solution to manage increasing quantities of content and provide the needed performance. This is particularly important as organizations add not only more email content to the archive but also files, social media posts, voice-mails, and other content that will need to be retained for long periods. An archiving solution that isn't scalable will simply not meet the long-term content retention requirements of an organization and could increase the level of risk that an organization faces by not archiving all necessary content.

## **Flexibility**

Flexibility is another key decision point for any archiving solution because as new data types must be archived, the solution must be designed to retain them and allow complex searches to be conducted on their content. Moreover, it's essential that content is stored in a meaningful way: Storing social media posts in flat text files, for example, instead of in their native format, may not satisfy every organization's social media retention obligations.

## **Cost**

Finally, but certainly not least, is the cost of the solution. While long-term storage costs for archived content may not be a critical consideration for on-premises systems, it can be an issue for content stored in the cloud if per-gigabyte pricing schemes are employed. This is a particularly important consideration given that many organizations don't have detailed and thorough content deletion policies, so content tends to be retained past the time that's required by legal precedent or regulatory requirement.

- » Examining the next generation of archiving: Archiving 2.0
- » Introducing Micro Focus Retain archiving solutions

# Chapter 4

## Archiving 2.0: Adding Intelligence to Your Data

In this chapter, you look into the future of information archiving and how you can use your archived information not just for litigation and regulatory defense but also for proactive decision making in the present and future.

### Archiving 2.0

Based on a recent Forrester survey, organizations face ever-increasing challenges with legacy archiving systems. These challenges force a disruption to the archiving industry, as we know it. Legacy archiving systems are accessible only to technology managers or compliance officers. They are stagnant and stale, holding content and customer communication largely based on fear and compliance purposes. You don't have centralization of the platform and oversight of the archiving applications. There's no synchronization or alignment of teams and Technology Management, Legal, Compliance, and Business Stakeholders. You don't have synchronization between e-Discovery, Records Management, and Archiving.

Instead, all are separate systems within the organization with no crossover. Social media, mobile messaging, and collaborative

applications will become the next e-Discovery Achilles heel — just like email was a decade ago. User adoption challenges have plagued Enterprise Content Management and Records Management for years, with inconsistent categorization, outdated user interfaces, and complex folder structures thwarting productivity.

This disruption caused innovative technology vendors to develop solutions that face these challenges head on and that have developed adaptive archiving platforms to grow with business needs. The analysts are referring to these new archiving platforms as Archiving 2.0.



REMEMBER

At its core, Archiving 2.0 is at the critical intersection of Enterprise Archiving, Enterprise Content Management, and Archived Content. Figure 4-1 shows that you can take the organizational silos of unstructured data and structured data and bring it all together into one central archive that enables organizations to not only perform basic archiving but also complex e-Discovery, Business Intelligence reporting, and critical data insight.

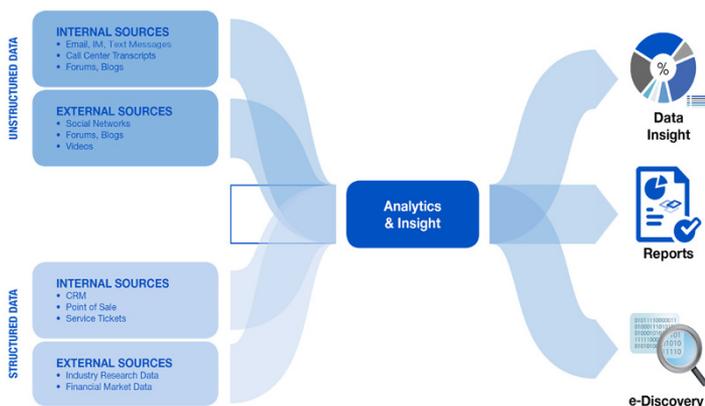


FIGURE 4-1: Archiving 2.0.

According to Forrester and other analyst firms, Archiving 2.0 solutions will quickly displace legacy archiving systems. Mobile access, simpler search, and increased analytics are reshaping the archiving market. Analysts report that this disruption is causing organizations to rapidly leave their current legacy solutions for a next-generation or Archiving 2.0 archiving solution.

To appreciate Archiving 2.0 solutions, it might be helpful if we give you a little background on the traditional methods for a bit of comparison. Traditionally, when you think of archiving, you

may think of preserving and archiving email. In the past, organizations have focused on preserving and protecting all inbound and outbound email messages so that, should the need arise, they could be accessed at a later date.

Organizations in regulated industries were the first early adopters of archiving solutions. They were required to capture email data from line-of-business (LOB) applications, or content from file shares, to meet compliance regulations. The key driver was to store email strictly to maintain compliance — and that is where archiving stopped.

Because archiving was so focused on email, the first archiving vendors built platforms from the ground up specifically developed to collect and store email for an extended period of time, and basically, this is what archiving became. It was something you threw in the corner, locked away, where only the network administrator had access to it. The hope was no one would ever need to access it or pull anything out of it, but you had it there if you ever needed it. Basically it was still behind closed doors.

Unfortunately, if you needed to access, restore, or find email because of a lawsuit, this is an example of what you would find: gigabytes and gigabytes of disorganized PST files, distributed throughout hard drives (or backup tapes) throughout your company. The administrator manually searched through the information, hoping to find a file or email (or emails) within volumes of data. This process often took days — and sometimes weeks — to find and assemble. Even then, there was no way to guarantee that all the data could be collected or if it all *was* collected.

Email archiving was even more difficult than old paper archives because there was little-to-no indexing, and searching was limited to exact coordinates. And most archiving vendors haven't been able to adapt away from this email-based mentality; their solutions are quickly becoming outdated legacy systems.

Many vendors have tried to add on, or license, separate specific point archiving solutions for each of these data sources. But this has only created a disjointed stop-gap. The major problem of having separate, disconnected archives hasn't been solved.

With traditional legacy archiving solutions, an organization must implement a separate archive for each communication data source. For example, you have a dedicated archive for email, one for mobile, and yet another for social media. But this just creates

further complexity. With multiple archives, your organization has to maintain and pay for separate solutions. And keep in mind that because of these separate and disconnected archives, the organization can't ever search across the entire archive store.

To further complicate things, combining database records with emails, or images, or documents can be of little value unless a context ties the various data structures together. According to Forrester and many analysts, this aging way of archiving that legacy products provide is forcing organizations to rapidly move to replace these legacy platforms with more complete unified communication archiving solutions.

## DERIVING VALUE FROM E-DISCOVERY

A key account in a commodity sales organization is coming up for renewal. The account's long-time account manager has recently left the company, and a new employee has been brought in to manage the client relationship. There was no opportunity for knowledge transfer, and the new representative isn't sure where to turn. She has heard rumors that the client is very difficult and has taken a hardline in past year renewal conversations.

Like any good account manager, she decides to do some research. The problem is that there are several systems of record, including a Customer Relationship Management (CRM) mail log that contains all communications to the client, with literally thousands of emails back and forth over the years between various people at both organizations. A further complication exists in that the marketing engine sends thousands of notification emails to the client domain, all captured in the CRM. There is simply too much for one person to review.

The organization has, however, recently deployed a comprehensive content archiving solution, which is connected to emails, IM, and the mail logs in the CRM. The account manager queries across those sources, using the client account and decision maker as the key search terms. As the query begins returning matches, there is more than just emails. There are hundreds of IM conversations containing the search terms, and even live chat from the technical support team.

To be able to make sense of all the relevant information, the account manager turns to a key feature of the new system, a sentiment

analysis, to review and code the communications. While some of the email conversations from past years of renewal do indicate a negative tone, it turns out that this client put in a very time-sensitive support request through the live chat while the account manager was on vacation. The incident was handled so quickly by a support representative that the client praised the service level both through chat and in emails sent to the previous account manager. There is even an IM conversation between the support representative and the account manager where they discuss the recent win and agree that it should make the upcoming renewal a guarantee.

Armed with this insight, the new account manager can identify exactly how the client was helped and incorporate that positive experience as the cornerstone of the renewal proposal. By using e-Discovery to search multiple data sources, conduct a sentiment analysis on the output, and drill deeper into both internal and external communications, key insight is uncovered, extracted, and applied to a revenue driving action.

## Introducing Micro Focus Retain

In this section, you discover the complete archiving solutions from Micro Focus.

### Retain Unified Archiving

Retain Unified Archiving provides unified archiving of all business communication, including email, social media, and mobile communication data for case assessment, search, and e-Discovery. It can be deployed on-premises or in the cloud.

Retain Unified Archiving is a unified archiving suite primarily focused on email archiving for Microsoft Exchange and Office 365, but it also includes comprehensive native support for archiving Gmail, IBM Notes, Bloomberg Enterprise, and GroupWise email. In addition to email archiving, Retain Unified Archiving supports the archiving of electronic business communication, including data created on mobile devices, social media, and IM with Skype for Business.

Traditionally, the corporate archives were viewed as a compliance driven cost-center for the organization, leading to a general distaste and increasing debate over whether costs were worth the small benefit they received. Because archiving is still mandated by law for many organizations — and others do it in case

of litigation — the question today has turned from “How do we minimize the costs of this and get it out of the way?” to “How can we maximize the value we get for each dollar we spend on these services?” This paradigmatic shift has opened a new way to look at e-Discovery and archiving, moving to the idea that the data can, and should, be leveraged to help drive the business forward.

Modern archiving and e-Discovery have evolved into a powerful tool to turn static data management into an invaluable analytics engine. There is a constant flurry of corporate communication across a variety of media in every organization, representing a massive, previously untapped resource for insight generation. Whether it’s preempting a potential security breach, understanding more about a client, or warning of policy breaches or other undesirable employee conduct, e-Discovery tools have expanded their capabilities beyond point-in-time use cases, and into everyday business decision making.



REMEMBER

Saving information in case of an audit is good (archiving), being able to find what you need when audited is better (traditional e-Discovery), but having a tool that can analyze all those records in real time against both standard and custom rules to identify non-compliant filings, or better yet, unclaimed deductions (fluid e-Discovery), now that’s valuable insight!

## Retain Email Archiving

Retain Email Archiving provides multi-platform unified message archiving for Microsoft Exchange, Office 365, Skype for Business, Gmail, and GroupWise. The messaging data is archived in one central location, which can be accessed by end-users and administrators directly through Retain’s Web Access Archive Viewer.

## Retain Mobile Archiving

Retain Mobile Archiving archives mobile device communication data for Android, BlackBerry, and iOS, including SMS/text messages, BBM Messages, BBM Enterprise, phone call logs, and PIN Messages.

## Retain Social Archiving

Retain Social Archiving provides monitoring and data insight into message context and tone of all posts for Facebook, Twitter, YouTube, LinkedIn, Instagram, Vimeo, Flickr, Pinterest, and Google+ (on and off network).

- » Improving IT productivity
- » Protecting your company's reputation
- » Defending your company from costly litigation

## Chapter 5

# Ten Questions about Data Archiving

**M**any customers and organizations are interested in archiving. And they always have a lot of questions. They want to know why they should be archiving and what they should be archiving. They want to know if they really need to archive mobile devices. They want to know how good archiving software really is. In this chapter, I give you the most common questions (and the answers) people ask about archiving electronic communication data, such as email, social media, Instant Messaging (IM), and mobile device data:

» **Are there really regulations that require my company to archive?**

Yes! Organizations have many concerns when it comes to managing their data. The most common concern is whether they're compliant. They want to know about the regulations that affect them and how an archiving solution can help them.

### »» **How can archiving improve productivity?**

The ever-growing amount of content stored on email servers is taxing them to the point where they may slow down and possibly go offline, which reduces your employee productivity. Employees end up waiting for servers to come back online or spend endless hours searching for a single email. An archiving solution can help improve your email system performance and reduce downtime by allowing you to delete messages from the email system after they've been archived.

### »» **Can archiving protect my company's reputation?**

Reputation damage is a common risk associated with electronic communication, especially with social media. It is easy for an employee to share something online that is inappropriate or potentially damaging to your organization. That one employee could be logged into the corporate social media account and could accidentally or maliciously post content that severely damages your company's reputation. Furthermore, email, IM, and social media provide avenues for harassment, discrimination, and bullying. Social media use can result in trade secrets, proprietary information, personal data, and other sensitive information being leaked very easily.

Archiving provides an organization with oversight on this data and helps an organization go back and see what was posted. Plus, with a good archiving solution, like Retain by Micro Focus, you can monitor and filter social media and IM and can prevent a post from ever being shared, or preventing the scandal and reputation damage before it ever occurs.

### »» **How can archiving help with information governance?**

Organizations are dealing with ever-growing storage requirements. In fact, Gartner has found that the volume of digital business data is growing at a rate of 40 to 60 percent each year. What does this mean to your organization? Are you prepared to deal with this volume of information?

This is where archiving is essential. You need to manage your data, and you need the content to be stored in a central, searchable location. As storage requirements grow, your costs grow. With this growth of data, your email

systems also become bloated and will not perform properly. Get that data off your main servers. Archive all that data. A proper archiving system offers single-instance message storage and will compress data when archiving, which in turn reduces your storage footprint. This will increase your server speed and functionality.

» **After the data is archived, how do you get to all that data?**

Archiving solutions allow you to search and access all your electronic communication from a central location. Your end-users, IT, legal, and other teams have access to archived messages and can perform e-Discovery with ease.

» **You want us to archive, but what does that really mean? What should an organization archive?**

Business best practices say that at a minimum, all organizations must archive email. Along with the email, they need to archive all metadata, attachments, files, appointments, calendar items, and folders. But, it's essential for you to archive all other forms of electronic communication data, including social media, IM, and mobile communication content. In fact, the Federal Rules of Civil Procedure (FRCP) have been recently updated to include penalties for failure to preserve Electronically Stored Information (ESI).

» **Can we monitor and archive something as personal as social media?**

Absolutely! If your employees want to access their social media accounts at work, they must be subject to having their posts and comments reviewed and archived. It is essential for your company to have oversight on what is being said.

» **What can I do to better manage my corporate social media accounts?**

Corporate social media accounts must be monitored and archived. There has been a string of scandals that really prove this point. Apart from those scandals, a company needs to see what people are posting on the corporate social media page and to be able to go back and see what has been posted. The collection of this information is invaluable to gauge the effectiveness of social media and to be prepared

in case of litigation or investigation. A social media archiving solution gives you content oversight and provides a central repository for all your corporate social media activity.

» **Do you have any advice for archiving mobile device data? What about bring your own device (BYOD)?**

Mobile devices, as we know, are a mainstay for employees. Most of the workforce now carries at least one mobile device. Your decision now is whether to offer corporate-owned devices to employees, which gives you full control of what is done on the device and gives you a means to archive the mobile communication data. Or, you can allow employees to bring their own device, but you'd need to add some type of application that allows for mobile calling and texting using a separate business number. Separating business communications from personal gives you oversight into what is being said in business, keeping personal information separate from business.

# Notes

# Notes

# Mitigate business risk with archiving 2.0

With increasing risks associated with email, social media, IM, and mobile communication, you need a proactive information archiving solution to protect your organization. Information archiving solves major business concerns, including information governance, data life cycle management, compliance, security risks, business data preservation and protection, easy eDiscovery and data access, protection from reputation damage, and management of all electronic communication.

## Inside...

- Ensure compliance and perform eDiscovery
- Export and redact communication data
- Increase email system performance
- Improve employee productivity
- Reduce storage needs, costs, and data volumes
- Prepare for audit and open records request



**Christina Wood**, CMO GWAVA, is from Los Angeles and is a data-driven leader, writer, speaker, and expert in archiving with 20 years in High-Tech. **Que Mangus** is an ITIL v3 certified speaker, writer, and expert in archiving, collaboration, and security with 10+ years of software marketing experience.

Cover Image: Courtesy of Micro Focus

Go to **Dummies.com**<sup>®</sup>  
for videos, step-by-step photos,  
how-to articles, or to shop!

for  
**dummies**<sup>®</sup>  
A Wiley Brand

ISBN: 978-1-119-45063-4  
Not for resale

# **WILEY END USER LICENSE AGREEMENT**

Go to [www.wiley.com/go/eula](http://www.wiley.com/go/eula) to access Wiley's ebook EULA.