

Critical Considerations and Best Practices

# Seven Steps to a Successful Archive Migration

Who should read this paper

IT administrators responsible for mail, archiving, and eDiscovery, and members of IT, legal, and business teams interested in improving cost-effectiveness of storage, backup and recovery, legal discovery, and cloud computing.



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## Introduction

Archiving solutions help organizations manage the vast amounts of unstructured data they create and collect. Archiving improves application performance, makes better use of storage, and dramatically reduces the time and resources needed to run backups. Archiving also simplifies enforcement of an organization's retention and expiration policies, and indexes records for efficient search, discovery, and disclosure to comply with audit, internal investigatory, and legal or regulatory requirements.

As archiving solutions proliferate, mature, and improve, more organizations are faced with decisions about whether, and how, to consolidate information archived using different solutions, or to migrate archives to a solution that more closely matches their business requirements. These are difficult decisions, because archives are large and technically complex, archiving solutions are not designed to be migrated from, and errors can be costly. But as incumbent archiving systems struggle with increasing demands, the consequences of not migrating may be even more severe. Failure to migrate from an underperforming archiving solution exposes your organization to ever-increasing costs and risks that impair efficiency and growth.

This paper is a guide for organizations considering migration of some or all of their archived information to a new solution. It outlines the reasons for considering migration in the first place, issues to consider when planning projects, and best practices for carrying out smooth transitions to new archiving solutions. These practices represent the accumulated experience of Symantec and its partners across hundreds of archive migrations, including many large multinational corporations and organizations in highly-sensitive government, finance, and healthcare sectors.

## Reasons to migrate

Archive migration is a defensive move: no organization migrates an archive unless internal and external pressures compel it to. But both kinds of pressure are on the rise, and occasionally "boil over" into full-blown emergencies. Changes like these are leading more organizations to consider migrating their archives:

### Internal pressures

**Productivity and capacity constraints:** Mailbox quotas subject email administrators and archive specialists to unending exceptions and requests that eat into their productivity. Poorly indexed, inefficient archiving solutions with clumsy interfaces leave users unhappy, too.

**Storage overhead:** Storage requirements soar when organizations try to overcome capacity limits by adding more storage. Most archive solutions claim to cut mail, content-management, and file-system bloat, but without transparent access to archived information, user pressure for larger quotas never ends. Many organizations learn too late that a "free" archiving solution can lock them into unending purchases of high-performance storage as unstructured content continues its relentless rise.

**Long backup windows:** Another consequence of mail, content-management, and file-system bloat—those large databases and indexes change constantly, and backing them up puts pressure on already tight backup windows. Some archiving solutions maintain large index databases more than twice the size of data actually under management, and multiple index database instances may be required to support eDiscovery solutions. These solutions exacerbate the storage overhead dilemma, further impacting data protection activities.

**Infrastructure reduction/consolidation:** Moving from virtualization and cloud computing initiatives, data center consolidation projects, or merger and acquisition activity creates strong incentives to migrate to a single future-prepared solution that can handle expected and unexpected growth.

## Seven Steps to a Successful Archive Migration Critical Considerations and Best Practices

**Content diversity and growth:** Graphics, video, and other rich content are increasingly deployed for business use in email attachments, Microsoft SharePoint® files, and network file systems. The rise of social media and other Web-based applications has added entirely new categories of content that many archiving solutions are unprepared to manage, leaving IT to wrestle with new, immature archiving point solutions as their organization adopts new content sources and struggle with meeting compliance requirements to retain data from those new content sources.

**Strained administrative resources:** Teams are swamped, especially in organizations that assign archiving responsibilities to administrators who must also maintain mailboxes, Microsoft Active Directory®, networks, and more. In addition, when eDiscovery requests hit, IT resources often have to drop what they are doing and immediately focus on running eDiscovery searches and placing relevant data on legal hold.

Specialist “churn” is a particular problem for organizations running new or “boutique” archiving solutions—lacking a large customer base or support organization, such solutions rely on the expertise of specialists, who are scarce, expensive, and highly mobile.

### External pressures

Product lifecycles are reduced when archive solution providers move older or acquired solutions to end-of-life support status, or cut development and support commitments, forcing expensive “rip and replace” upgrades.

Roadmap uncertainty is an increasing concern as consolidation continues among archiving solution providers. Mergers and acquisitions, along with emergence of unproven cloud archiving startups, raise concerns about long-term support for solutions intended to preserve information for many years.

Platform migration, for example to Microsoft® Exchange 2013 or Microsoft Office 365®, provides an opportunity to re-evaluate archiving solutions. Older solutions may not be able to archive records from Exchange 2013, and the capabilities of new solutions to index content directly in the cloud, with no on-premise infrastructure or performance impact, may justify migration. But organizations should be wary of promises that new email platforms make archiving unnecessary. So-called “unlimited” mailboxes may raise subscription costs significantly over baseline, and few email solutions offer even elementary archiving features such as indexing, journaling, or the most basic tools for implementing records-retention and expiry policies.

Growing use of eDiscovery in litigation or to meet requirements under the U.S. Freedom of Information Act or European Union disclosure obligations may justify migration. The trend is clearly toward more eDiscovery and disclosure, as greater awareness and better tools encourage its use.

### Getting it right: Criteria for a successful migration

Migration specialists are unanimous on one point: a successful archive migration requires planning and investment. Because archiving solutions are still relatively new, very few organizations have any experience with the migration process, and benchmarking archive migrations against routine upgrades underestimates the scope of the task. An archive may contain up to 10 years of unstructured data, captured and indexed by an obsolete and possibly failing solution. But the size and complexity of the task need not make it overwhelming: a few practical precautions and careful planning can simplify the task and reduce impacts.

Identifying key stakeholders and including them in the earliest planning stages pays big dividends in controlling the scope and impact of your migration effort. Email “power users” may prioritize familiarity of the interface or continuity of service over performance or mailbox size, giving your migration team valuable latitude in managing the transition. IT storage specialists can outline approaches such as tiered or

hybrid on-premises and cloud storage that offer real savings for the long term. And the legal team may find defensible ways to reduce the volume of information that needs to be migrated and the performance of the storage infrastructure on which they need to be kept.

Because migration is an extended process, be sure to consider and communicate impacts on the organization during the migration, not just in the end state. For example, you may need substantial temporary storage to maintain dual archives, or to support indexing of the new archive. Archiving and backup workloads are likely to be affected, both directly by changes in the archiving solution and indirectly by the migration project's impact on storage and network traffic. Be sure to set expectations among email users and eDiscovery specialists for availability of archived content during the migration.

Finally, be sure to select an archiving solution that captures or recreates attributes such as legal hold status and journal metadata. The latter is not the same as mailbox metadata, so a failure here may risk losing data, such as BCC and Distribution List membership.

### **A plan: Best practices for archive migration**

Across hundreds of enterprise archive migrations, Symantec and its partners have developed and refined practices to help any organization migrate archived information to a current, fully supported archiving solution (whether on-premise, in the cloud, or as a hybrid deployment), maintaining service levels in line with user expectations, and keeping costs and disruption under control.

#### **1. Estimate scope and set priorities**

Based on your success criteria and metrics, evaluate and prioritize your migration according to variables such as data types and volumes, legal and regulatory hold status, and storage requirements. Determine how you will meet the priorities of key stakeholders, for example:

- User experience required by business, legal, and compliance teams—for example, how important is transparent mobile access (or offline access) to your target archiving environment?
- Role-based access to archived information, giving authorized delegates secure, independent access to archived information without going through IT.
- Storage volume and backup windows required by IT teams throughout the migration and in the target environment.
- eDiscovery search granularity required by your legal team and consulting counsel.

#### **2. Consider cloud alternatives**

Traditional on-premise archiving solutions offer a high degree of performance and control, and may be required by privacy laws that restrict the physical location of data storage outside some regulatory environments. But in cases where those considerations are not compelling, cloud alternatives can reduce on-site infrastructure, cut management burdens, and scale quickly to meet changing demands. In fact, according to Gartner, by 2016, 80 percent of organizations will move to a cloud model for enterprise information archiving.<sup>1</sup>

In addition to capturing content from on-premise sources such as Microsoft Exchange Server 2010 and 2013, cloud archiving solutions can also offload traffic from on-site networks by archiving data directly from other cloud-based solutions, such as Office 365, Box, and Salesforce® Chatter. A hybrid solution can combine attractive elements of both on-premise and cloud alternatives, for example by archiving files from servers on premises and email from a cloud-based service. This approach gives users the responsiveness they expect while keeping archived information—regardless of where it is stored—readily accessible for search and eDiscovery in the cloud.

<sup>1</sup> Gartner, Inc. "Five Factors to Consider When Choosing Between Cloud and On-Premises Email Archiving Solutions," Alan Dayley, Feb. 25, 2013, page 2.

### **3. Retain and migrate selectively**

Up-to-date retention and expiry policies can help reduce archive storage requirements in the target environment. But if the new archiving solution provides better capabilities for information governance, it will be easier to migrate first and then update policies in the new, more favorable environment.

In some circumstances, it may be advisable to migrate only more recent data—a year or two, perhaps—to the new archiving solution, leaving older data to expire over a few years in the incumbent system. Additional costs associated with this approach may include capital, maintenance, and management expenses to maintain dual infrastructure, parallel eDiscovery processes, and so on. But these can be balanced against the benefits of a faster, less disruptive migration, with lower costs for new storage infrastructure.

### **4. Sequence migration logically**

Since most archive migrations advance one data type at a time, planners need to consider how to sequence them. Priority should be given to the data for which the new archiving solution delivers the most business value. If an organization is migrating to address an urgent eDiscovery requirement or escape a bloated or corrupted index, for example, it makes sense to migrate Journal information before mailbox data. This approach gets the index under control quickly, facilitating eDiscovery and reducing near-term legal/regulatory compliance risk.

The same logic applies to mailbox migration. Depending on the pain points and pressures driving the project, the migration team might choose to start with the most sensitive data (for example, legal and human resources), the most tolerant users (IT), the most demanding departments (management, sales), or some other sequence. The keys are to choose a sequence that makes sense for your organization, and keep all stakeholders in the loop about progress.

Email will be the focus of most migrations, but unstructured content in SharePoint libraries, file systems, and emerging content sources, such as instant messaging and Twitter™ should be carefully considered and sequenced.

### **5. Prepare the target environment**

For a cloud-based archive, the vendor takes care of preparing the target environment. Estimation tools created for individual archiving solutions provide a convenient way to predict requirements and make sure critical elements—such as a Microsoft SQL Server® for the target environment— aren't overlooked.

Deduplication, compression, and single-instance storage techniques can dramatically reduce storage costs, backup windows, and eDiscovery search time associated with archives. Consider both hardware deduplication and single-instance storage that can share instances of individual items across different content sources, storage elements, or entire archives: for example, a PowerPoint file stored in SharePoint and network storage and sent as an email attachment to 10,000 users worldwide could be reduced to a single compressed instance in the archive while reclaiming storage with the original content source.

If you opt for a cloud-based archiving solution, the vendor will be responsible for ensuring that the target environment is prepared.

## 6. Monitor your migration

If you are moving to an on-premise archive, keep a careful eye on reports from both source and target environments as your migration proceeds, with special attention to issues like these:

- Test data integrity in the target environment to make sure that migration, indexing, deduplication, single-instancing, and compression have worked as planned.
- Make sure security settings of sensitive content (for example, accounting, legal, and human resources files) have migrated along with the content itself so that the information in the archive is not exposed to parties without appropriate authorization.
- Be sure that you've arranged for backup of the archive environment, and test it to make sure recovery processes will work correctly when needed.
- Keep full records of data that didn't migrate successfully, along with all relevant metadata—although you may never need them, they are essential to prove chain of custody in the event of eDiscovery.
- Continuously check with end users to determine how the migration is affecting them, and adjust the process to ameliorate any difficulties.

If you are moving to a cloud-based archive, you should select a vendor that has years of experience with large-scale migrations and that you feel comfortable trusting as an extension of your IT team. Make sure the vendor you select can provide you with detailed and thorough documentation on its ingestion process before you sign the contract. You should also make sure they can demonstrate that chain of custody will be maintained throughout the process. In addition, the cloud archiving vendor should ensure that all information has been properly indexed and is fully searchable by administrators and end users before your implementation is considered complete.

## 7. Choose an effective target solution

Most archive migrations start from incumbent solutions that lack the maturity, adaptability, and support needed for success over the long run. Resist the attraction of the latest cool features by considering how they will look in retrospect 10 years from now. In particular, watch out for solutions that create large, complex indexes that may require heavy investments in infrastructure. These can grow to match—or even exceed—the size of the archive itself, creating risks above and beyond their substantial storage costs. Index complexity raises risks of corruption, forcing organizations to fall back on slow, costly manual discovery to meet legal or regulatory requirements. They also raise risks of finding spurious “connections” in indexes and databases that generate more questions than answers. Be sure your archive meets eDiscovery recommendations for your industry: the frameworks, standards, and resources available through the [Electronic Discovery Reference Model](#) provide an excellent starting point.

Customer references and product demonstrations can help you make sure you get the actual integrated product functionality you need. Availability and quality of end-user and administrative search and eDiscovery tools are especially important when the first job of your archive is to support eDiscovery. In other circumstances, mailbox support, storage management, and data-mining capabilities may take the lead. If you are evaluating a cloud-based solution, make sure the vendor will allow you to do a proof of concept (POC) prior to signing a contract.

Finally, choose your migration partner or consultant with the same care as your target solution. Few partners will volunteer that they can't help with archive migration, but just as few have the expertise, specialized tools, sensitivity to regulatory compliance issues, and in-depth experience to back up the claim. Work from your target solution provider's short list, interview in depth, and check reference sites.

### Summary

Archive migrations entail cost and time commitments, but performed correctly can generate quick returns and long-term gains through better management of information growth, faster application scale-out and performance, and a more seamless end-user experience. Migration tools and services are constantly improving, and new options such as cloud-based solutions offer attractive new capabilities. Negative impacts and unwelcome surprises can be avoided by careful planning and the simple steps outlined above.

### Archiving without limits

The most important step is to select a solution that will address your organization's current priorities, and meet its archiving requirements for the long-term. Solid technology and advanced features are important, but be sure your provider also offers:

- The scale, financial strength, and organizational stability to remain a strong partner over the decades-long lifespan you should expect for your archive.
- An active development program to keep your solution current with future changes in technology, business, and the legal/regulatory developments.
- An experienced partner network with local presence, capable of providing specialized deployment, migration, management, and related services for your archiving solution.
- For on-premise deployments, a significant "labor pool" of potential IT staff members with direct experience setting up and managing the archiving solution you select.
- Deep support resources (for on-premise deployments, a worldwide community of users ready to help you address implementation, migration, and management issues).

Symantec understands that no two organizations share the same requirements for storage, management, and discovery of their business-critical information. That's why we offer the flexibility of archiving without limits. Symantec archiving solutions provide flexible options—you can select on-premises software or 100 percent cloud-based archiving services that can meet the needs of a small business or an enterprise with tens of thousands of users. Archiving without limits means archiving all your business-critical information, from email to files to social media, and giving your users access from anywhere they work—on Windows® or Mac® OS in the office, offline, or through their mobile devices. Archiving without limits improves IT operations, application upgrades, mailbox management, eDiscovery workflow and backup SLAs—today and into the future.

More than 25,000 customers worldwide use Symantec on-premise and cloud-based archiving solutions. Gartner has recognized Symantec as a leader in Email and Enterprise Information Archiving for nine consecutive years. Symantec's intelligent archiving platforms store, manage, and enable the discovery of corporate data from email systems, file servers, instant messaging platforms, and content management and collaboration systems.

- Symantec Enterprise Vault applies intelligent classification and retention technologies to capture, categorize, index, and store target data to help enforce policies and protect corporate assets—all while reducing storage costs and simplifying management. It also incorporates specialized applications such as Discovery Accelerator and Compliance Accelerator to help organizations mine archived data in support of legal discovery, content compliance, knowledge management, and information security initiatives.
- Symantec™ Managed Enterprise Vault is a monitoring, management, and support service for organizations that want to retain their data on-premise while leveraging the benefits of remote management. Customers are supported by the Symantec™ Business Critical Services team, who are experts in both service delivery and the Symantec archiving technologies.

## Seven Steps to a Successful Archive Migration Critical Considerations and Best Practices

- Symantec Enterprise Vault.cloud provides a cloud-based archiving service that helps organizations better store, manage, and discover business-critical information. Enterprise Vault.cloud securely and defensibly captures information in a single repository. It delivers a highly intuitive end user experience, with seamless access and rapid search functionality. Plus, the built-in collaborative eDiscovery workflow provides legal teams with roles-based access to the archive, expediting the eDiscovery process.
- Clearwell eDiscovery Platform™ from Symantec helps enable enterprises, governments, and law firms to manage legal, regulatory, and investigative matters using a single application. It was purpose-built for eDiscovery, making it easy for organizations to defensibly solve real-world challenges across the entire eDiscovery lifecycle from legal hold and collections through analysis, review, and production.

There has never been a better time to move Symantec archiving solutions.



## About Symantec

Symantec protects the world's information, and is a global leader in security, backup, and availability solutions. Our innovative products and services protect people and information in any environment – from the smallest mobile device, to the enterprise data center, to cloud-based systems. Our world-renowned expertise in protecting data, identities, and interactions gives our customers confidence in a connected world. More information is available at [www.symantec.com](http://www.symantec.com) or by connecting with Symantec at [go.symantec.com/socialmedia](http://go.symantec.com/socialmedia).

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