Seven steps to a successful archive migration.

Critical considerations and best practices.
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Introduction

Archiving solutions help organizations manage the vast amounts of unstructured data they create and collect. Archiving helps organizations manage data better by preserving it for long-term storage and indexing records for efficient search and discovery. Depending on the use case, archiving can simplify enforcement of an organization's retention and expiration policies, improve application performance, reduce the time and resources needed to run backups, and dramatically improve productivity for audits, internal investigations, or legal and regulatory disclosure and compliance.

As stored data and data sources proliferate and evolve, more organizations are faced with decisions about where to archive, whether to consolidate, or how to migrate archives to a solution that more closely matches their changing business requirements. These are difficult decisions, because archives are large and technically complex. But difficult choices must sometimes be made if incumbent archiving approaches no longer align with IT goals.

This is a guide for organizations considering migration of some or all of their archived information to a new solution. It outlines 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 Veritas 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 pressures are on the rise from both internal and external data management issues. Challenges like those listed below are leading more and more organizations to consider migrating their archives:

Infrastructure reduction/consolidation: Virtualization and cloud computing initiatives, data center consolidation projects, or merger and acquisition activities provide strong incentives to migrate to a single future-prepared solution that can handle expected and unexpected growth.

Application platform migration: A switch to new email platforms such as Microsoft Exchange 2016 or Microsoft Office 365 may make some older archiving systems obsolete. In other cases, some organizations just prefer to move to a Software as a Service (SaaS) archive solution if they are moving email to the cloud.

Compliance and eDiscovery: A challenging regulatory environment with industry specific retention requirements, laws such as the U.S. Freedom of Information Act (FOIA) or European Union General Data Protection Regulation (GDPR) obligations may compel migration to a more capable archiving solution. The trend is clearly toward more powerful compliance search, eDiscovery and disclosure tools and systems.

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.

Content and storage growth: Graphics, video, and other rich content are increasingly deployed for business use in email attachments. 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. Storage requirements soar and management challenges multiply when organizations try to overcome capacity limits simply by adding more storage and not improving retention practices.
Long backup windows: If you continue to archive on premises, another consequence of mail, content-management, and file-system bloat is that backing it all up puts pressure on already tight backup windows. Your archive solution should be able to dramatically shorten application backup times by migrating stale application data to long term archive storage, and if it doesn’t, it’s not doing its job.

Legacy solution fatigue: Many organizations have found that the original archiving solution they deployed has locked them into a cycle of frustration. Some archiving platforms have just not kept up with changing IT demands and that subjects email administrators and archive specialists to unending troubleshooting that eats into their productivity. Poorly indexed, inefficient archiving solutions with clunky interfaces hurt user productivity too and make them unhappy.

Getting It Right: Criteria For A Successful Migration

Migration experts seem to all agree on one point: a successful archive migration requires planning and investment. Because archiving systems have become mission critical infrastructure, and manage massive amounts of data, organizations that lack previous experience with the migration process should not underestimate the scope of the task. An archive may contain up to 10 years of unstructured data, and that data needs to be re-indexed by the new platform, 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 customer satisfaction and project success. Data end-users, email power users, other organizational IT specialists, and legal or compliance managers should all be consulted and kept informed on the project. Getting them involved will generally elicit better cooperation. Their involvement may help you identify ways to reduce the volume of information that needs to be migrated.

Migration is an extended process, so be sure to consider and communicate impacts on the organization during the migration, not just in the end state. 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, and place your organization at risk of non-compliance.

Best Practices For Archive Migration

Across hundreds of enterprise archive migrations, Veritas 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—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

Organizations move applications such as email to the cloud for a myriad of reasons: cutting infrastructure cost, outsourcing high maintenance systems, and providing better reach for mobile or remote users. However, it’s possible to move email to the cloud, but keep archiving on-premises. In fact, some organizations, either for control or regulatory reasons, prefer to do it this way. Alternatively, it’s possible to use cloud archiving to retain information for either cloud or on-premises email systems.

For many customers today, the preference is to outsource both email and archiving to a Software as a Service (SaaS) provider.

Should you choose the cloud archiving route, think about migrating at least some of your legacy data to the cloud archive too. Most SaaS archiving providers offer a data ingestion service to help you move your data from its current location to their cloud.

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. Maintaining the incumbent system will certainly require continued capital, maintenance, and management expense to maintain dual infrastructure, but these expenses can be balanced against the benefits of a faster, less disruptive migration, with lower long term cost for new archiving system.

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. 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 as well.

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Due to its flexibility and pricing structures, Gartner is seeing a majority of organizations selecting SaaS for new or updated messaging data archiving implementations, with migrations to Office 365 and organizational mandates to reduce on-premises infrastructure as the key drivers.”

Gartner’s 2018 Magic Quadrant report
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.

If you are moving to a self-managed archive infrastructure, 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.

6. Monitor Your Migration

As your migration proceeds, 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 going, and adjust the process to help with any difficulties.

If you are moving to a cloud-based archive, 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. 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 Proven Vendors and Trusted Partners

When picking your next archiving platform, consider the long term track record of the vendor, and how it’s likely to perform five years from now.

In particular, watch out for solutions that don’t scale well, because this will limit the platforms ability to keep pace with your expanding needs. An efficient, best-of-breeds solution has historically been the better investment. Large, complex systems that combine too many technologies, or are complex to deploy, manage and maintain, raise risks of high maintenance cost, IT inefficiency, and end-user dissatisfaction.

Remember that defensible retention practices and efficient downstream search, hold, retrieve, and collection capabilities are equally important requirements. If you do business in a regulated industry or public sector, you need to make sure your archiving system preserves information in a way that meets compliance requirements—and then when discovery is required—make sure it ensures a complete audit trail and secure chain of custody. The Legal Industry’s Electronic Discovery Reference Model provides an excellent starting point for research on discovery requirements.
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 legal teams. 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 provides a competitive Service Level Agreement (SLA) and 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, more defensible and efficient eDiscovery, 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).

Veritas 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. Veritas 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 Veritas on-premise and cloud-based archiving solutions. Gartner has recognized Veritas as a leader in Email and Enterprise Information Archiving for nine consecutive years. Veritas’ 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.
- **Veritas 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, extending the tool set to reviewers and outside legal counsel if needed.

- **Veritas™ Enterprise Vault** is for organizations that want to retain their data on-premise. Veritas 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.

- **Veritas eDiscovery Platform™** from Veritas 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.

- **Information Studio** provides clear visibility, targeted analysis and informed action on data to identify areas of waste, risk and value. With the power to organize data and take informed action, organizations can be confidently prepared to handle security concerns, new regulations and continuous data growth to ultimately regain control of their data.

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