## **DOCUMENT MANAGEMENT IN THE CLOUD**

Storing and Organizing Files and Records in a Hosted Environment







Not only do cloud solutions represent a significant shift in how businesses store and access their digital content, but also how they pay for it. In a software-as-a-service (SaaS) subscription model, all expenses for storage, management, maintenance and support are included in one monthly fee. In addition, cloud-based services take up only a small fraction of the ongoing operational resources required for server ownership.

Cloud-based document management improves upon the old shared-server model that often produces a drag on office efficiency. Simple file control measures eliminate the errors associated with open-ended folder structures, where employees often cannot locate the correct business information because items get saved in multiple locations, misfiled, misnamed, or accidently deleted.

Companies that leverage the cloud for document management enjoy the benefits of scalable online storage capacity and robust file sharing capabilities without committing to large initial outlays for hardware and licenses associated with on-premise installations.

The move to a hosted file management system can provide an opportunity for companies to put their house in order with respect to cluttered server folders, inconsistent record keeping, and confused workflow procedures.

# Purchasing Licenses vs. SaaS Subscription: A Pricing Model Comparison

For many years, the only way to deploy a document management solution was to purchase server hardware along with software licenses to run the platform. Companies would then hire technical staff to administer the system, backup data, and troubleshoot problems. When the equipment or network software approached obsolescence, companies would reinvest in these assets through periodic upgrades.

Cloud-based platforms now offer a very different model, which in many cases has proven to be more affordable and more flexible. In a SaaS pricing structure, a subscriber pays a monthly fee, in effect leasing the application and data storage space as opposed to owning and maintaining hardware and software in-house.

System use is paid as a recurring operating cost --

similar to electricity or phone service -- rather than as a depreciating asset. The cloud solution vendor takes over the responsibility of operating servers, backing up data, and upgrading the technology.

Whether one model costs more than the other over the lifetime of the system depends on the business situation. What is clear is that the subscription model now drastically lowers – or even eliminates -- the barrier for entry. Therefore, new projects with limited start-up capital can see the immediate benefits of leveraging a cloud-based document management solution.

More established businesses -- those already invested in on-premise servers – might also employ the subscription-based model as a viable alternative to expanding or upgrading storage capabilities.

#### **OWNERSHIP MODEL**

#### **Upfront costs**

Server hardware Server platform software licenses Document management licenses IT staff time for implementation

#### **Recurring costs**

IT staff time (routine maintenance, backup, troubleshooting)

#### **Budgetary categorization**

Assets

#### **Future costs**

Upgrade or expansion of server hardware Upgrade/add platform licenses Upgrade/add file management licenses

#### SUBSCRIPTION MODEL

#### **Upfront costs**

None

#### **Recurring costs**

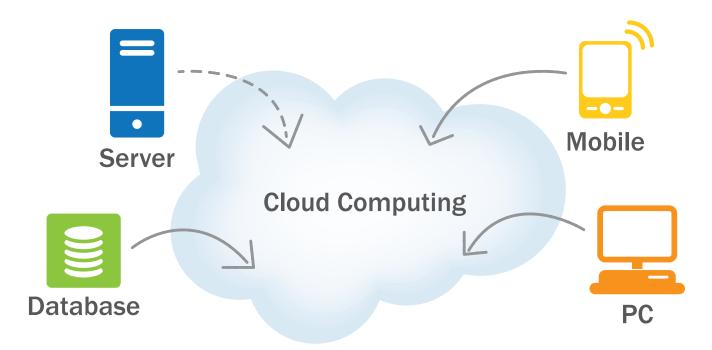
Monthly subscription fee (includes storage, software, backup and support)

#### **Budgetary categorization**

Operating costs

#### **Future costs**

Monthly subscription fee (free upgrades) Incremental increase in monthly fee as the need for more users and capacity grows



### Why Manage your Business Documents in the Cloud?

## Convenient online access to all company documents from any location

Cloud access makes sense for today's laptopequipped employees, who can retrieve any business document from home, while waiting for a flight, or while in a meeting at a client's office. Similarly, organizations with multiple office locations can share data from a single repository, rather than from separate, unrelated systems and folders.

## Freedom from the responsibilities of server ownership

Operating servers requires the tasks of monitoring, maintenance, and administration, as well as expert troubleshooting when a server goes down. Companies that leverage cloud solutions are liberated from not only the initial costs of buying dedicated hardware and software, but also from the unpredictable costs of ownership.

#### No capital expenditures

Hosted storage and software services are classified as operating expenses, while in-house servers and software licenses are categorized as assets (which depreciate and require eventual replacement). Companies pay for hosted services much like they do utility bills. This accounting re-categorization enables companies to maintain their capital budgets for other projects.

#### **Greater reliability**

While in-office servers have a reputation for downtime that stalls work progress, cloud systems deliver an average uptime of 99.97%. Cloud vendors store data on massive state-of-the-art servers and continually cycle storage through reserve systems.

#### **Better protection against data loss**

Laptops can be lost, hard drives can fail, and servers can crash. Storing and managing information in the cloud protects companies against accidents that can occur to physical devices. The service provider performs backup of cloud content regularly.

#### More control over information access

Multiple firewalls protect against unwanted access from the outside, while document management permissions place password controls on specified files or document types, which enforces privacy of sensitive material internally.

#### **Seamless scalability for future changes**

If more storage capacity is needed, the organization simply pays the vendor incrementally more, rather than purchasing additional licenses and servers. Conversely, if work is cut back and a subscriber now has fewer users, the monthly fee goes down, making cloud-based document management more responsive to business cycles than on-premise systems.

### Keeping Cloud Content Organized

### CHALLENGES OF TRADITIONAL FILE SHARING PLATFORMS

Typically, only a fraction of a company's information assets consist of structured data, which is automatically arranged and accessed by business applications. Examples of structured data includes entries in an accounting program or customer contacts in a database.

Unstructured data are files that accumulate haphazardly on hard drives and shared server folders, unrelated to an overarching framework. Unstructured information can range

from contracts, reports, and spreadsheets, to presentations, videos, and photos.

The essential problem in traditional shared file management and storage platforms is that companies have little control over, or even knowledge of, their unstructured files. It is dependent upon individual users to remember the names of files, their contents, and their storage locations.

In this environment, folder structures that start out in with some semblance of logic quickly sprawl into disorganization because there are no mechanisms governing naming conventions of files or the creation of folders. Documents get misfiled, misnamed, and mistaken for other versions.

# GIVING STRUCTURE TO CLOUD-STORED DOCUMENTS

Firms that have implemented a cloud-based document management system have an opportunity to take a smarter approach to company-wide file sharing that keeps all content structured and precisely identified. These companies can effectively manage their digital content and avoid the typical pitfalls of openended folder systems.

In cloud-based document management systems that employ a metadata approach to organizing and displaying files, the chaos of ad-hoc, openended folders becomes a thing of the past as

records are shown to users in "dynamic views" based on specific search criteria.

Indexing each stored item with key word properties and other metadata gives a file a unique identity. Users can retrieve any document immediately with a combination of words that describe the document or its purpose.

When all items are structured in the cloud with their associated metadata tags included, users can query and cross-reference digital archives in many different ways. They can also sort files by other data attributes recorded by the system: within a range of dates, by user access or authorship, or by any custom-made classification.

# **Features of Integrated Document Control**

Cloud-based document management solutions feature useful tools and capabilities designed to reduce errors and boost productivity, such as:



#### Protection against overwritten changes

Multiple users working on the same file can easily lead to loss of information due to overwrites and "version creep" issues. A document management structure brings common-sense features like check-in/check-out procedures to open files from the cloud repository.

#### Operating system integration

Cloud deployment does not necessarily mean employees have a new application to learn. Access to cloud solutions are often integrated into PC operating systems and commonly used applications, such as the Microsoft Office suite. Users open and save files in the cloud using much the same commands and interfaces they already use in the Windows environment.

#### Workflow indicators

Just as authorship, date, and category attributes are embedded into each document, users can add customized metadata according to their business rules. Recurring document templates can feature simple tags that indicate their status within a workflow (e.g., "awaiting review" or "manager approved"). A file query instantly shows the state of work progress.

#### Offline access

Document management in the cloud doesn't work without an Internet connection, right? On the contrary, many cloud-based packages enable users with Internet accessibility issues (when traveling, for example) to view, create, edit, and store documents in offline mode, with automatic synchronization taking place once re-connected.

## Automated calendar reminders and email notifications

In some hosted file management packages, subscribers can take workflow automation even further. The system can calculate due dates based on customized rules, email documents to particular employees when they reach a certain status, or automatically schedule task reminders in common calendar and project management applications.

#### **Security of information**

Many organizations feel a strong sense of security by being able to see the physical servers their important business information resides on. The truth is that cloud-based document management systems are just as secure, if not more secure, than on-premise systems for managing files and preventing data misuse. With cloud-based systems, companies can control data visibility and hide sensitive documents while maintaining a single storage repository and automatically conducting periodic backups of all data.

#### Preservation of all previous versions

When a user saves edits to a document, the common procedure is to alter the filename (from file1.docx to file2.docx, for example). Too often this generates confusion as to which version is the latest and where it is located. With version control features, the filename remains the same through the entire process of revision. The system preserves each previous saved version, along with a full audit history of user changes.

### FITTING THE CLOUD INTO YOUR ORGANIZATION

# WITH NEW CLOUD OPTIONS COMES THE NEED FOR NEW IT DEPARTMENT ASSESSMENTS

This paper has shown how cloud-based document management eliminates up-front costs for hardware and software resources, reduces IT staff requirements, and offers scalable data storage capacity for future needs. The decision remains – whether the time is right for your organization to deploy a hosted file management system, and if so, which solution best addresses your specific set of requirements.

Companies that have already invested heavily in on-premise server systems may not feel the need to abandon existing infrastructure, but might find the cloud to be a viable alternative to traditional expansion or upgrades. In cases where organizations add new departments, launch large-scale temporary projects, or otherwise need to quickly expand their data storage or access capabilities, a "hybrid" solution that incorporates both a cloud platform and an on-premise network scheme may provide the most logical approach.

Many organizations evaluating cloud-based document management solutions are ready to take advantage of the many benefits associated with a hosted solution, but are not ready to sacrifice the comfort and familiarity of their on-premise systems. "Will I still have fast access to my files in a cloud environment?" and "will I have the ability to save documents directly from my CRM or ERP system into the solution?" are examples of questions every company should consider when evaluating cloud-based document management systems.

Companies that have made the decision to deploy a cloud-based document management system should conduct a thorough self-assessment before evaluating potential solutions. Consider not only the volume of documents and number of users, but also your specific organizational needs, including the structure of content, permission controls, audit requirements, retention policy, and daily workflow.

With a clear goal of what you want a solution to achieve, you can find an offering that best matches your business.

#### About M-Files Inc.

M-Files Inc. develops M-Files professional document management software and the cloud-based document management service M-Files Cloud Vault. M-Files is highly configurable and easy to deploy and use, enabling companies and businesses in a variety of industries make dramatic gains in efficiency and productivity by improving the way they organize and manage their business documents and processes. More than 15,000 customers in over 90 countries worldwide use M-Files to manage their documents. M-Files is available in 24 languages and is in use at customers such as AstraZeneca, BSA LifeStructures, EADS, FinnComm Airlines and Parker Hannifin. For more information, visit us at www.m-files.com.

#### **About M-Files Cloud Vault**

M-Files Cloud Vault enables companies to organize and manage company documents and information on secure servers hosted on the Windows Azure platform, for less than \$20 per month per user. This software-as-a-service (SaaS) version of M-Files requires no set-up and provides advanced document management features such as fast search, secure user access permissions, check-in/check-out, version management, support for scanned paper documents, email and email attachments, and offline use.

With M-Files Cloud Vault, businesses can incorporate a cloud-based document management solution into their existing on-premise business systems. The resulting "hybrid" model supports a uniquely flexible computing environment that enables organizations to maintain their current ERP, CRM and other on-premise deployments while utilizing the cloud to improve the way they organize, manage and track important financial and operational documentation and processes. For more information, visit www.m-files.com/cloudvault.



