Huntsville Archives

Premium Records Management

WHITE PAPER - Andrews Software for Huntsville Archives

July, 2004

Archiving Digital Records

Executive Overview

In today business environment, most information begins life as a digital file. Whether it is a Word document, JPG image file, email or a web page, the information will go through a period of active use, and then will need to be put into the "archives" for long-term preservation. The long-term preservation of digital information differs from the long-term preservation of paper documents. Most companies actually store most of these electronic records by printing them out and storing the paper - losing all of the benefits of their original, digital format in the process. In this paper, we explore the need for business to archive business information, and examine the benefits of electronic archiving.

Born digital

It is well documented that we are creating information more quickly than ever before. Forrester estimates that business storage needs are doubling every 18 months and large firms are adding trillions of bytes of storage capacity annually. Most of this information is critical to the long-term functioning of the business and needs to be archived for various periods of time. The Enterprise Storage Group recently forecast that over the next four years, there will be a 64% compound annual growth rate in the volume of records needing to he archived due to compliance.

The reasons for archiving information vary: internal data requirements to keep the business running or to increase productivity: retention of information mandated by agency or government rules: and the need to keep track of customer interactions is increasingly important in resolving litigation. At least 70% of information on corporate computers is never printed. This fact has not been lost on corporate oversight organizations such as the SEC. And a key provision of the Sarbanes-Oxley act states that anyone knowingly destroying documents related to a federal investigation can he imprisoned for up to 20 years. Clearly, corporations raced to put in place secure and reliable outsourcing processes for their digital records.

How is this information best preserved?

Historically, records originated as paper documents and were archived as such. Most companies are familiar with file boxes and either store the boxes onsite, or ship them to a third party. By moving data offsite, there is an increased level of security from physical damage and theft. For some, this is the easiest way to archive electronic documents as well — print them out and put them in a box. The advantage is clear. The paper is always readable and will last far longer than is typically required by regulation or business need. The problem with paper archiving is also clear. It is time consuming and costly to convert to paper on the front-end and time consuming and costly to retrieve records on the back-

end. Finally, the sheer magnitude of the amount of information being created would require the construction of thousands of new record archiving warehouses.

Digital storage is inherently more cost effective

The cost of converting digital documents into paper records (i.e. printing) is approximately $.05 per page for black-and-white printing, and can range up to $50 per page for color. These amounts only include the cost of paper and ink (or toner). They do not consider the labor costs to print and file the document. In contrast, as the archiving of an electronic record can be automated, it costs nothing.

Savings do not stop once the document is converted. Ongoing monthly costs for storing documents digitally can be as much as 50% lower than the cost of storing large amounts of paper records. Similarly, at the end of the retention period for the records, there is no cost to destroy electronic records, while physically destroying boxes of paper records can be high.

Finally, the search and retrieval of electronic records is far easier and faster than dealing with physical records. This leads to increased productivity for your staff— and lower ongoing operating costs.

How should records be stored digitally?

Customers are considering a number of scenarios: archiving backup tapes, storing archives within active database systems, and write-once optical media. Of these, only archived tape storage and active database systems are recognized by NARA as acceptable for long-term archiving. Even then, there are significant ongoing operational costs. For example, 10% of all magnetic tapes in the archive must he rewritten annually to ensure that they continue to be readable.

The use of CDs and write-once optical media (WORM), also presents a challenge when managing retention policies. A sound retention policy will ensure that individual records are destroyed as soon as they have met their retention schedules. This means that all of the records on a given CD or WORM disk must have the same retention date so they can all be destroyed at the same time. If not, then all of the records that still need to be retained must be copied onto another disk before the first can be destroyed. This significantly increases the cost and complexity of destroying records. Additionally, CDs and other optical media are not considered stable enough for long-term storage.

Using industry standard magnetic drives is both cost effective and delivers the highest levels of performance and flexibility. With technologies such as RAID, magnetic disks are reliable and easily maintained. It is also easier to search for information in the system and quickly retrieve it. With new technologies such as serial ATA drives, the cost of online storage will continue to decline.

Outsource your electronic archive

The major problem with storing information on disk arrays is that the data can be more easily altered or deleted. The very flexibility that makes disk archival attractive, is also a potential liability to corporate compliance officers. The most flexible and cost-effective solution, just as it is with paper records, is to outsource the long-term retention of critical information

By moving the archival of information outside of the enterprise, you can more easily protect the information from unauthorized alteration by employees of the company. Robust and secure archiving applications act as a buffer between users and the physical data. These applications can prevent direct access or alteration of archived records, ensuring that the original archived document or e-mail is preserved for the specified retention period.

An outsourced solution is more cost-effective than in-house solutions. In an effort to mitigate the burgeoning cost of enterprise storage systems, most corporations have implemented storage area networks (SANs) as a way to consolidate and more easily manage the growth in data, and it is very tempting to put the archives right on the SAN.

However, as we discussed up above, there should be security concerns with allowing this data to be managed in the same way that day-to-day operational data is managed. A separate storage infrastructure can be put in place for archiving only, but this will require the addition of additional equipment and may need additional staff to maintain and operate. An outsourced solution requires neither of these. Finally, by storing information with an independent third party, compliance with regulatory guidelines for monitoring and protection can be easily ensured.

Summary

As regulations increase the amount of data which needs to be archived, companies of all sizes need to put in place systems that enable them to meet regulations as cost effectively as possible. The sheer amount of corporate information that needs to he archived makes it impossible to continue with present methods of archiving.

Hosted, online archiving easily meets the requirements for secure storage and preservation of critical records. And, by providing automation for key business processes and not needing in-house staff or equipment, provides the best overall performance at a reasonable cost.

Huntsville Archives delivers highly flexible, comprehensive proven storage and disposition solutions for the records and information management industry. From paper to media to digital archiving, Huntsville Archives has the business and technical expertise to transform the management of critical information assets.

For more information, contact Huntsville Archives by calling 931-438-2505 or visit our website at www.huntsvillearchives.com.