



## Electronic document storage and retrieval brings new efficiencies to key university functions for significant time and cost savings

### Benefits

- Cost savings from replacing paper and microfiche storage
- Fast, easy access to critical documents based on a user's access level
- Greater efficiencies through high-speed scanning and rapid document distribution and retrieval
- Multiple document retrieval methods for refined searching
- Greater protection of documents through regular backups and remote storage

### Business overview

Salisbury University, located on the Eastern Shore of Maryland, is a regionally accredited, four-year comprehensive university offering more than fifty distinct undergraduate and graduate degree programs. Salisbury University offers degrees in undergraduate liberal arts, sciences, pre-professional, and professional programs, including education, nursing, social work, and business, and a limited number of applied graduate programs. Located in Salisbury, Maryland, the university has more than 7,000 students and 1,400 faculty and staff members.

### Challenges

Electronic document storage and retrieval is not new to Salisbury; in fact, the university has been relying on imaging technology for more than ten years to capture, store, and manage critical business information. Salisbury's original objectives for imaging in the mid-1990s still hold true today: to eliminate cabinet storage of hard copy documents as well as microfiche, and to create new efficiencies for university employees who require quick, accurate access to business information.

Salisbury's original system consisted of Minolta imaging software and a Panasonic optical jukebox using 1.4 GB WORM platters. This system had served the university well, but by 2004 it was time for an upgrade. The proprietary software was no longer distributed or supported, the jukebox had become filled to capacity, and the WORM platters were no longer available. "We were having to look for them on eBay," said Ross Leisten, enterprise business system coordinator at Salisbury University.

Furthermore, the old software system required installation of a "thick client" on every user's desktop, and the university wanted to deliver faster response times than a mechanical jukebox could offer—especially with multiple retrieval requests.

Salisbury's successful implementation of the Oracle suite in 2004 presented an opportunity for the university to revamp its document storage and retrieval strategy for a faster and more integrated system based on leading-edge technologies. "It was time to come into the 21st century with our imaging solution," said Leisten.



## Business profile

### Salisbury University

Four-year university offering 53 undergraduate and graduate degree programs

### Industry

Education

### Business solution

AP/AR processing/invoicing, document management, transactional content management

### EMC products

EMC Documentum ApplicationXtender

### Deployment summary

System for capturing, storing, and managing a wide range of business critical documents across 22 applications and 10 university departments

### EMC partners

Kofax, NMS Imaging

## EMC solution

At the core of Salisbury's new imaging solution is EMC® Documentum® ApplicationXtender®, an easy-to-use electronic solution for storing, organizing, and managing documents, files, and other business-critical information. Working in tandem with ApplicationXtender Web Access, a browser-based add-on, ApplicationXtender gives Salisbury University users fast, security-controlled access to information. Salisbury hosts ApplicationXtender on a Dell 2650. Kofax Ascent Capture volume scanning software drives the imaging stations consisting of four Kodak scanners. Designed for business-critical performance and the scalability requirements needed to support their growing image store, a Dell 6650 houses all of Salisbury's scanned information. Salisbury also engaged NMS Imaging to provide consulting and implementation services for the project.

"Compared to all the other products we evaluated, ApplicationXtender offers the most in terms of openness and portability as well as easy integration with our other applications," said Leisten. "With ApplicationXtender Integration Module (AXIM), ApplicationXtender is by far the most comprehensive solution." AXIM allows virtually any business application to be seamlessly integrated with ApplicationXtender, giving users the ability to retrieve business documents and information without having to leave their desktop applications.

The ApplicationXtender installation has had far-reaching impact on Salisbury University, with more than twenty applications deployed to ten functional areas. To date, almost two million pages have been scanned into the system for accounts payable and receivable, general accounting, grants and sponsored research, human resources and payroll, student admissions, information technology (IT), student financial aid, provost, and the registrar's office.

"NMS was part of the implementation team for the original imaging system and we've now been associated with Salisbury University for more than ten years," said Ganesh Venkatachalam, consultant for NMS Imaging. "People had come to love the old system and it had become an integral factor in the way business is done here—so they were initially a little resistant when we launched the ApplicationXtender project. Once they moved to the new system, their acceptance was almost instant, especially when they experienced the improvements in response time and ease of use."

### *Centralized scanning operations for greater control*

At Salisbury University, a dedicated staff handles most high-volume scanning via a central processing station within the IT department. Most scanning requests coming in from other departments are for longer-term archival of documents; however, the staff also provides 24-hour turnaround on more urgent requests. "This arrangement allows for two levels of quality checks—one by the scanning staff, and one by the originating department," said Leisten. "Since the scanning team is dedicated to this task, they've been able to develop an 'expert eye' for the proper templates and scanner settings."

Another high-volume scanning station is located in the registrar's office, due to the large amounts of student records that require archiving there. Other scanning stations for ad hoc scanning are located in the accounting department. In an average month, the scanning stations process from 15,000 to 20,000 pages of information.

### *Secure document access for decision support*

One of the broadest ApplicationXtender applications within Salisbury University is a large repository of student records shared by the admissions, financial aid, and registrar's offices as well as the advising area. Through a web browser interface, users in these offices have quick, accurate access to the vital information they need to make informed decisions. In one example, users in the financial aid office can query the system to retrieve the data they need to determine whether a student is eligible for a scholarship.

The Salisbury admissions office serves as a central repository for all student entry data and documents, such as transcripts and applications for admission. Admissions documents are sent over to the IT scanning team to be scanned into the repository, and then are made available almost immediately to any faculty and staff members who need access (based on their access level). A graduate studies department, for instance, can access the student records to determine whether a student qualifies for admission to a particular graduate program. Access is controlled by security levels within ApplicationXtender and based on document type, as well as the user's role.

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**Ross Leisten, Enterprise Business Systems Coordinator**

In the accounting area, purchase orders and invoices are managed by four separate ApplicationXtender applications. Purchase orders from the accounts payable department are scanned in daily and then distributed out to purchasing personnel, who have access to view all current purchase orders as well as a historic record of orders. Through the same process, human resources and payroll personnel can access timesheets and contract information.

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### ***Beyond file cabinets and microfiche***

With ApplicationXtender, Salisbury University has been able to transition nearly all of its critical documents to state-of-the-art document archiving and retrieval, from the old methods of archiving documents in paper form or on microfiche. Among many other benefits, the new system has made it easier for the university to enforce document retention policies that are specified by federal regulation such as Sarbanes-Oxley, as well as industry-standard guidelines that are in place for accredited universities. The Maryland Higher Education Commission, the University System of Maryland Board of Regents, the Middle States Association of Colleges and Secondary Schools, and the American Association of Collegiate Registrars and Admissions Officers (to name a few) all impose document retention guidelines for different curricular and student documents ranging in length of time from a few days to forever.

With the success of the ApplicationXtender system among core university departments, several satellite organizations that have never archived their documents electronically will soon be coming online. These include the school of education and the public relations office. The library, university foundation, public radio station, and the Ward Museum of Wildfowl Art—caretaker of millions of dollars worth of duck decoys—have also expressed a real interest. “In our experience, as satellite organizations discover how valuable the system is for archiving information, they begin to see the possibilities of document distribution and the ways in which it builds connections between people and different offices,” said Leisten.

“We’re storing close to two million pages of information in the ApplicationXtender repository, which is the rough equivalent of 120 four-drawer filing cabinets,” he said. “When you think of the savings, not only in terms of physical space but costs of moving paper around, such as photocopying and distribution, it’s easy to see how valuable the system is. And, we have much greater peace of mind knowing that our data is protected in the event of a disaster, since the database is backed up daily to a remote location.”

## Summary

By replacing obsolete imaging technology with a state-of-the-art document storage and retrieval system based on EMC Documentum ApplicationXtender, Salisbury University has realized numerous benefits. High-speed scanners ensure that critical information can be stored rapidly and made available quickly to the university personnel that depend on it to make decisions. Users, in turn, can access the documents rapidly and accurately right from their desktops, based on security levels as defined by the system. Not only can users work more efficiently, but the university has realized significant cost savings from replacing hard copy document storage and microfiche.

## About EMC

EMC Corporation (NYSE: EMC) is the world leader in information storage systems, software, networks, and services, providing automated networked storage solutions to help organizations get the maximum value from their information, at the lowest total cost, across every point in the information lifecycle. Information about EMC’s products and services can be found at [www.EMC.com](http://www.EMC.com)

## About NMS

NMS is a full-service integration company specializing in Information Delivery Systems. Founded in 1971, the company has been deeply involved in the development of image management solutions for over thirty years. NMS is proactive in helping businesses, institutions, and organizations optimize their business process using the world’s most advanced imaging and workflow technologies. The company’s expertise involves developing systems that integrate document images, data resources, and workflow technology into powerful information management tools that will achieve real, measurable business benefits. Our expertise, methodologies, and business practices have facilitated organizations to implement solutions in a timely manner and derive best value for their investments. For more information visit [www.nmsimaging.com](http://www.nmsimaging.com)



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