





## **IBM Information On Demand client success stories focusing on enterprise content management.**

This book of IBM client success stories points to the business benefits reaped from IBM Enterprise Content Management Solutions, and Information On Demand. IBM's Enterprise Content Management software integrates and delivers important business information that offers new business value on demand. The software supports a wide variety of information types such as; images, documents, e-mail, e-records, and provides the appropriate content based on user intent and relevancy. IBM Information On Demand provides a set of solution portfolios to help companies in addressing their most critical information-intensive business initiatives.



## AMEC Paragon

---

### Overview

---

#### ■ **Business Challenge**

*To manage the documents associated with a formal ISO 9001 process, successfully manage very rapid growth, and to continue to attract and acquire Tier One clients.*

#### ■ **Solution**

*Integrated with established engineering process rules and work requirements and made it possible to manage and transmit 100 percent of the company's documents electronically.*

#### ■ **Key Benefits**

- *Provided a competitive advantage that lead directly to the acquisition of larger, more prestigious clients*
- *Accelerated document processing and transmittal*
- *Realized a cost savings of 35 to 40 percent*

AMEC Paragon, an ISO 9001:2000-certified organization, provides engineering, design/drafting, project management, procurement, construction management, inspection, and training management to the oil and gas as well as pipeline industries. AMEC Paragon's expertise encompasses oil and gas production and treating, gas compression, midstream projects, onshore and offshore pipelines, onshore facilities, offshore platforms, floating facilities, subsea systems, and safety and environmental management programs.

AMEC Paragon employs more than 550 people at its Houston headquarters and another 75 people in Kuwait. In addition, AMEC Paragon has established a joint venture company in Angola to enhance the local engineering infrastructure while supporting AMEC Paragon's participation in the country's oil and gas production facility and pipeline projects. In total, AMEC Paragon has worked on more than 4,000 projects in North America, South America, Europe, Asia, and Africa.

In January 2005 Paragon Engineering Services was purchased by AMEC Corporation. AMEC is an international project management and services

*“FileNet’s content engine has an extremely flexible and powerful architecture that supports all of our commodity content management requirements and frees us to focus our development energies on the bigger picture—data integration and work process integration—that provides even greater ROI to our organization.”*

– Marc-Henri Cerar  
Manager of Information Systems  
AMEC Paragon

company, employing around 45,000 people in some 40 countries around the world.

#### **The Challenge**

As an engineering contractor, AMEC Paragon's prime activity is the production of documents, which

## AMEC Paragon

### Headquarters

- Houston, TX

### Industry

- Oil & Gas Management

### Application

- Automate the design, creation, and processing of mission-critical customer documents

### Products

- FileNet Content Services

### Benefits

- Improved document creation, access, and version control
- Accelerated document processing and transmittal
- Standardized on a single document design tool
- Dramatically improved job scheduling and delivery

the company controls with a formal ISO 9001 process. AMEC Paragon needed a way to manage the documents associated with its project execution. Further, it required a structured approach for document management as a result of its rapid growth. To attract and acquire Tier One clients, it was essential for the company to have a sophisticated document management system in place.

As the company grew and more documentation was done electronically, there was a growing disconnect between AMEC Paragon's process requirements and their ability to efficiently control documents. "Managing documents on a network file server without real version and access control was not working," says AMEC Paragon's Marc-Henri Cerar, manager of Information Systems. "Plus, our customers required us to have the ability to transmit documents electronically. Our goal was to be able to manage and transmit 100 percent of our documents electronically."

To reach its goal, AMEC Paragon decided to automate its manual procedures for document design, creation, and processing. However, not just any document management software would meet the exacting requirements of the company. AMEC Paragon's content management solution had to be robust enough to support the project execution of a state-of-the-art engineering company.

### The Solution

In 2002, FileNet was selected to replace AMEC Paragon's obsolete, home-grown solution. AMEC Paragon selected FileNet Content Services as the foundation for what it calls the AMEC Paragon Project Document System (PPDS). PPDS is specifically tailored to manage project documents, including both client deliverables and supporting documents.

According to Cerar, FileNet was chosen over competing systems due to its scalability, functionality, and flexibility. "FileNet came highly recommended to AMEC Paragon by many of our customers," says Cerar. "The ability of FileNet technology to be readily adapted to many different industry applications played a large part in the decision as well. The purchase and customization of the FileNet system has been less expensive and better received than the internally developed system it replaced."

FileNet Content Services was installed and implemented in 2003. "The most important factor in our successful implementation was the freedom we had in adapting the FileNet architecture to our engineering process rules and work requirements," says Cerar.

Cerar's refinements included built-in functionality that closely matched the day-to-day work activities of the system's 550 users. After the system was installed, end users encountered familiar actions providing a smooth transition for training and adaptation.

The PPDS system was fully implemented in January 2003. "The complete project document lifecycle is managed in the system," says Cerar. "New projects are batch seeded with a matrix of documents based on the original project estimate. When the documents are added, the security applied to them is based on the metadata attributes of document class, sub class, and document type. The documents are filed into folders based on these classifications in addition to the project number. The documents are developed and tracked through their respective lifecycles via key indicators."



"The PPDS system was put to the test on a recent \$35 million project. It was the first time, that documents for an entire engagement were developed and transmitted electronically," said Cerar. All the documents supplied to the client were 100 percent electronic. In the past, we wouldn't have done it this way. Instead, all of the documents would have been printed and put into binders, which might have filled several bookcases."

© Copyright FileNet, an IBM Company 2007

FileNet, an IBM Company  
3565 Harbor Boulevard  
Costa Mesa, CA 92626-1420  
USA

The original implementation of PPDS was on Content Services. This was updated to FileNet P8 in 2005. Along with the FileNet P8 implementation, AMEC Paragon introduced new capabilities such as the automatic generation of document numbers, allowing them to create multiple document numbers and assign them to specific types of documents. They also introduced an enhanced event model that enables additional functionality such as folder creation and filing based on the creation of specific document types.

Printed in the USA

01-07

All Rights Reserved.

### **The Bottom Line**

According to Cerar, the implementation of FileNet's Enterprise Content Management solution has provided AMEC Paragon with a competitive advantage that has led directly to the acquisition of larger, more prestigious clients. "FileNet has enabled us to step up and win larger projects," says Cerar. "FileNet gives us instant credibility with customers. It's a brand name they respect."

IBM and the IBM logo are trademarks of IBM Corporation in the United States, other countries or both. FileNet and its respective logo are registered trademarks of FileNet Corporation in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

For more information, visit the FileNet Web site at [www.filenet.com](http://www.filenet.com)

With FileNet, AMEC Paragon is now able to better manage the complete project document lifecycle. "The bottom line is that this system has empowered our business," says Cerar. "It has enabled us to scale up in ways we couldn't have done in the past. We can now manage all of the information for our projects. We can also manage the documents, data, and project aspects that come with added scale."

"We've seen a huge improvement in productivity, and we've realized cost savings of 35 to 40 percent in terms of document transmittals," Cerar concludes. "The FileNet system has provided us with functionality that we simply didn't have before. We now have better version control and improved management security."

# Customer response improved from five days to five seconds...

*Banca Alpi Marittime solves critical document retrieval problems with CM/R&B solution from Sowe, powered by IBM Content Manager Enterprise Edition*



Founded in 1899 Banca Alpi Marittime currently operates out of 18 branches, serving customers in the Piemonte and Liguria regions of Italy.

With an ever-expanding portfolio of products and services and increasing quantities of paperwork, the bank's filing demands exceeded the available space within the branches. The decision was made to move all paper filing out of the branches and into remote warehouse facilities, in order to relieve the situation.

This decision unfortunately increased their problems - especially with regard to customer service as document retrieval was increased to a minimum of five days. In addition warehousing and transportation costs multiplied, the manual storage process became fraught with errors, and customer satisfaction fell dramatically.

Finding a solution to this problem became the number one priority for the Bank's Service Area Director, Bruno Chiecchio.



## Customer satisfaction was paramount

Aware of this growing threat to the bank's reputation, Bruno Chiecchio set about the task of selecting a vendor who could expedite a speedy and BASEL II compliant solution within certain key parameters that were of paramount importance to Banca Alpi Marittime.



The priority, to provide an instrument that enables the on-demand access of client signed documents.

The objectives being to improve customer care, reduce paper archiving and transportation costs and to reduce the number of mislaid documents.

**BASEL II**  
*The Basel II compliance centers on the need for financial institutions to improve risk and asset management to avoid financial disaster. Specific to documentation is the requirement to have perpetual data storage and retrieval systems.*

*"...we succeeded in reducing document search time from 5 days to 5 seconds and revolutionized the paper archiving system."*

Bruno Chiecchio, Service Area Director,  
Banca Alpi Marittime





# Sowre delivers an e-Document Management Solution ...

## Business Challenge

Five day lead time to retrieve client signed documents, spiraling warehousing and transportation costs, and the inaccuracies of manual filing compelled Bruno Chiecchio to find a fast and effective solution.

A solution that would not only provide superior customer service, but would also have to integrate seamlessly into the bank's regulated work-flow process and satisfy the perpetual data storage demands of BASEL II compliance.

Bruno Chiecchio reviewed four proposals and evaluated them on three key criteria: **Safety:** All banking systems must provide uncompromising data security.

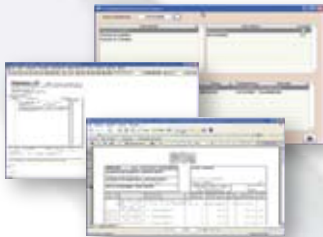
**Simplicity:** Solution must demonstrate a high degree of compatibility and ease of installation.

**Efficiency:** Added tasks must be straightforward in operation, and not overly onerous.

## The Solution - CM/R&B

Sowre, an IBM Business Partner was chosen with their solution CM/R&B (Content Manager/Retrieve & Barcode) Finance package, powered by the IBM Content Manager Enterprise Edition 8.3.

CM/R&B permits the electronic data entry of documents allowing for their subsequent traceability, which can be easily identified and retrieved when needed without incurring extra logistics costs. The creation of a common repository for all types of counter transactions streamlined the management and delivery of information across applications and staff.



The IBM Content Manager Enterprise Edition is the core of IBM content management software. It provides a single, open foundation to create, manage, and distribute all forms of content - records, images, documents, reports, e-statements, audio, video and web content. Enterprise Edition supports implementations from workgroups to high volume business processes, across multiple platforms and business solutions.

## Business Transformation

Instant retrieval of documentation at the counter has transformed the bank's service offering, achieved client transaction efficiency and provided significant cost savings at a stroke.

The solution provides BAM with both electronic data entry and retrieval on demand. Gone the manual paper trail - the fragmented five stage retrieval process. Now, instant web based document retrieval satisfying today's on-demand customer needs.

## Seamless Implementation

Having already worked with the bank in 2004, Bruno Chiecchio knew Sowre would respect the bank's workflow procedures during the implementation.

*"... in less than one week they optimized the passive management cycle by implementing the module called CM/R&B - Scan Server"*

Sowre's Dr. Davide Gianmaria Airaghi was confident the solution provided maximum value to the bank.

*"The installation of the product was really easy... our product, CM/R&B is made for integration, being a sort of common store for all the applications"*

20 stations were fully operational including training within five days. This included the server, scanner, Middleware and CM/R&B software. The transition from manual to electronic document entry and retrieval was seamless.

## Business Benefits

**Five days to five seconds** - the time the bank's clients now wait for stored documents to be retrieved. An on-demand solution that has dramatically shortened transaction duration and significantly improved workflow. Counter activity rate is now accurately analyzed, allowing for more cost-effective deployment of personnel. Logistics costs are substantially reduced.

Bruno Chiecchio acknowledges that Sowre's CM/R&B on the IBM Content Manager platform was the most cost effective and fastest solution available to the bank. It integrated easily with their existing EDP systems and satisfied the BASEL II perpetual data storage demands. Once operational the bank embarked on a two phase deployment to become paper-less and finally paper-free.

## Lasting Effects...

Sowre satisfied the bank's needs with minimum change and maximum effectiveness. Sowre delivered an electronic solution powered by IBM's technology that has given Banca Alpi Marittima a lasting advantage. Bruno Chiecchio adds:

*"This solution allows BAM to implement Digital Signatures on the Bank's documents, either individually or for batches of documents to minimize fraud."*

Secure, perpetual electronic data, logistics savings, efficient transaction flow and non-obtrusive compliant work practices have propelled the bank's ability to satisfy the growing demands of its clients with an immediate, on-demand, response.

## Simplify. Automate. Integrate. Comply.

The Sowre solution not only satisfied the bank's stringent operating criteria, its management functions help to ensure efficient personnel deployment based on counter activity.

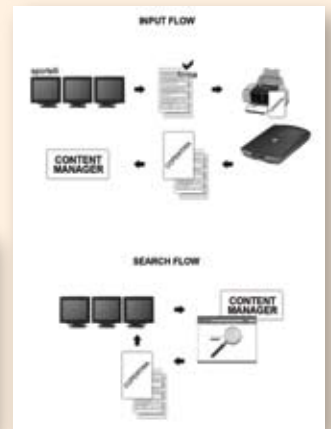
- Fast installation, no operational downtime
- Easy to use system, minimal training
- Extremely time efficient, workflow compatible
- BASEL II data storage compliant5

For additional information on how **Sowre** can help your organization contact us:

Via N. Machiavelli, 1 - 20025 Legnano (MI) - Italy

[www.sowre.com](http://www.sowre.com)

Tel. +39 0331 577205 Fax.+39 0331 464771



## Citigroup

---

### Overview

---

#### ■ **Business Challenge**

*Share infrastructure investments across Europe in order to optimize operational efficiencies and leverage current IT investments.*

#### ■ **Solution**

*Enterprise Content Management system that streamlines the application process, enables distributed exception handling, and provides instant access to information for all users, regardless of location. Work can now be distributed around the region according to the availability of the staff.*

#### ■ **Key Benefits**

- *Cut the application process from more than two weeks to two days*
- *Centralization of all data in one location supports optimum customer service*
- *Cost-savings of approximately \$5M*

A pre-eminent global financial services company, Citigroup has 200 million customer accounts in more than 100 countries, providing consumers, corporations, governments and institutions with a broad range of financial products and services, including consumer banking and credit, corporate and investment banking, insurance, securities brokerage, and asset management. Major brand names under Citigroup's trademarked red umbrella include Citibank, CitiFinancial, Primerica, Smith Barney, Banamex, and Travelers Life and Annuity.

#### **The Challenge**

In order to leverage its IT investments and optimize operational efficiencies and control across Europe, Middle East and Africa, Citigroup has established a central IT services centre for Archiving & Workflow solutions in Frankfurt that provides FileNet Enterprise Content Management (ECM) capabilities to business users across EMEA. As Marco Diehl, 1st Vice President for Cititech says, "We have now proven the concept of sharing infrastructure investment across Europe and have further plans to extend our capabilities within the Group."

*"We chose FileNet because of its market leadership and financial performance. Having made the initial purchase, we saw the potential to leverage our investment and the momentum we had achieved with the product. FileNet P8 provides advanced technology and long-term support, enhanced scalability to support mission-critical applications, and greater flexibility. The open architecture also facilitates integration."*

– Marco Diehl  
1st Vice President  
Cititech

In terms of total volumes supported by the centralized FileNet solution, Diehl estimates that the total archive is in the region of more than 3TByte of data. FileNet handles up to 100,000 images per day and 1,000 COLD reports, some of which can be 1,000 pages in length. In total, this amounts to between one and one and a half gigabytes of data each day.



For data security purposes, the system has disaster recovery support via a “mirror” system in a separate location in Frankfurt, as well as storing two copies of every document. There is a daily complete synchronization of all business processes.

### **The Benefit**

The benefits of Citigroup’s innovative central services centre model are considerable. Firstly, there are the cost savings, estimated to be in the region of several million USD annually, and Diehl expects further leverage in the long term: “Obviously, the more businesses we have using the system, the lower the unit cost becomes.”

Secondly, the centralization of all data in one location supports optimum customer service, both in terms of process / response speed and customer knowledge. Having a single place for all data also enables Citigroup to shift work around the region according to the availability of staff. This results in the most efficient and cost-effective use of manpower.

Thirdly, departments in any Citigroup division have the ability to leverage content and business process capabilities wherever they reside. This ensures optimum return on IT investment. In the future, Diehl plans to link FileNet to other front-end systems within Citigroup.

Managing projects centrally and across the enterprise means that Citigroup can meet its strategy of getting the right information to the right people at the right time, regardless of where they are located.

© Copyright FileNet, an IBM Company 2007

FileNet, an IBM Company  
3565 Harbor Boulevard  
Costa Mesa, CA 92626-1420  
USA

Printed in the USA

01-07

All Rights Reserved.

IBM and the IBM logo are trademarks of IBM Corporation in the United States, other countries or both. FileNet and its respective logo are registered trademarks of FileNet Corporation in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

For more information, visit the FileNet  
Web site at [www.filenet.com](http://www.filenet.com)

## Memorial Health System heals patient services with PhysicianLink portal and content management solutions.

### Overview

#### ■ Challenge

*Provide physicians and other care givers with the information they need, on demand, to treat the patient on the spot, regardless of where in the system the information originally resided*

#### ■ Why IBM?

*IBM had proven itself to be a high quality provider of highly available systems and IBM offered the breadth of products, due to the extent of its R&D activities, to solve the customer's needs*

#### ■ Solution

*Portal, content management and electronic medical record (EMR) solution makes the most efficient use of stored patient information*

#### ■ Key Benefits

*Improved patient satisfaction; reduced redundant paperwork, mailing costs, phone/fax time and personnel costs; increased documentation access for the physician's office staff and the hospital; decreased time from diagnosis to treatment; provided ability to retrieve information in seconds, rather than hours required previously; easier compliance with regulations regarding release of information; reduced costs and errors through elimination of manual paper-handling processes; acceleration of return on investment for new EMR system*



*The policy of the Memorial Health System is to treat all patients, whether or not they are insured; so the hospital had to innovate in order to keep costs down.*

Known for its excellence and innovation, the Memorial Health System (Memorial) in Colorado Springs, Colorado, is an example of a hospital system that has evolved from paper records and manual records handling to electronic information and records accessible through a convenient Web portal.

Memorial is growing fast along with the burgeoning half-million population of Colorado Springs. It needs to treat all of the citizens of its city, regardless of their ability to pay, which puts pressure on the hospital to maximize efficiency.

*“We selected an IBM infrastructure based on IBM DB2 Content Manager because of our long experience as an IBM customer. IBM provides high-quality information systems that are available 24 hours a day, 7 days a week.”*

*– Tom Kerwin, Vice President of Information Services and CIO, Memorial Health System*

## ***Providing clinical information where it's needed to do the most good***

*“Our PhysicianLink portal is an example of how our investment in IT gives us a competitive advantage. Fourteen hundred physicians in our community use the product. They love it. This really forms a support platform for all their systems and makes them want to work with us.”*

*–Dick Eitel, CEO, Memorial Health System*

As it sought to provide better care and reduce patients' costs, Memorial realized that it would need to switch to electronic health records to help it optimize the health, safety and comfort of patients, their families and the community. Such a solution would ensure that Memorial remains the preeminent healthcare provider in the community, leveraging technology and accelerating innovation to deliver predictable, stable and seamless patient care.

### **Vital link to 1,400 physicians**

In its first step, Memorial used IBM components such as IBM DB2®, IBM WebSphere® Application Server and IBM WebSphere Portal on IBM System p™ and System i™ servers to create and implement its PhysicianLink portal.

With PhysicianLink, physicians can quickly access patient lab and radiology results, patient demographics and insurance information, rounds, on-call lists, digitized radiology images, patient eligibility, transcribed reports, current national medical information, order procedures and much more from the Internet in a secure environment.

The success of PhysicianLink has helped Memorial establish itself as a leader within its healthcare community. “Our PhysicianLink portal is an example of how our investment in IT gives us a competitive advantage,” says Dick Eitel, CEO, Memorial Health System. “Fourteen hundred physicians in our community use the product. They love it. It gives them the information that they need, when they need it in a format that's easy for them to access. This really forms a support platform for all their systems and makes them want to work with us.”

With the physician portal developed with WebSphere Portal, physician offices no longer have to make telephone calls to access patient information from Memorial. This frees up staff to focus on productive business, instead of waiting on the phone for patient results. Benefits for the physician offices include:

- *Reduction of redundant paperwork, mailing costs, phone/fax time and personnel costs while increasing documentation access for the physician's office staff and the hospital.*
- *Decrease in time from diagnosis to treatment by having results more accessible.*
- *Provision of an accurate audit trail for communications and compliance.*
- *Reduction of admission and registration time while increasing the accuracy of patient information.*

### Information availability with content management

To broaden its electronic document and content management capabilities and deliver more online information to doctors and other healthcare givers, Memorial implemented IBM DB2 Content Manager and IBM DB2 Content Manager OnDemand. Using Kofax Ascent Capture, employees captured millions of records going back six years including clinical notes, test results, diagnosis reports and other records.

“We selected an IBM infrastructure based on IBM DB2 Content Manager because of our long experience as an IBM customer,” says Tom Kerwin, vice president of information services and chief information officer for Memorial Health System. “IBM provides high-quality information systems that are available 24 hours a day, 7 days a week.”

DB2 Content Manager serves more than a single purpose for Memorial. “In researching content management systems, we were looking for a system that was robust enough to take care of our business processing needs as well as our clinical needs,” says Kerwin. “So we chose DB2 Content Manager—for the financial and human resources operations of the organization as well as for the clinical operations.”

### Instituting electronic medical records system

Most recently, the hospital has implemented a comprehensive electronic medical records (EMR) system based on Cerner PowerChart and supported by an IBM infrastructure. The hospital is now leveraging information for maximum efficiency throughout its organization, reaching more than 3,000 users, including remote physicians and healthcare providers such as nurses, clinical staff and ancillary departments.

The PowerChart solution streamlines multiple workflow processes into a single desktop application that provides access to various functions that support the EMR system. It's also the foundation for numerous Cerner point-of-care solutions, including those for home care, physicians' offices, clinics, acute patient care, critical care, and long-term and rehabilitation services.

### Key Components

#### Software

- IBM DB2
- IBM DB2 Content Manager
- IBM DB2 Content Manager OnDemand
- IBM WebSphere Application Server
- IBM WebSphere Portal

#### Hardware

- IBM System p p630, p650
- IBM System i i570

#### Services

- IBM Software Services

*“IBM has delivered on its vision of open standards-based solutions, which has enabled us to serve our communities with prompt, authoritative information that can be easily accessed.”*

*–Tom Kerwin*

Memorial engaged IBM Software Services to integrate the new PowerChart system with its existing DB2 Content Manager implementation so that electronic patient records such as scanned documents and printed documents in PDF format could be made available through the PowerChart interface. Now, when a user wants to view patient information—such as face sheets, lab results, doctors' notes, progress notes, graphics, medications, discharge plans and consent forms—the PowerChart interface links with the DB2 Content Manager software's eClient viewer, and the viewer conveniently opens in a separate window on the user's desktop.

### **Leveraging a new weapon against illness**

For this implementation, IBM Software Services combined the skills of the Information Management Software Services team with those of the Healthcare Software Solutions team. To integrate the DB2 Content Manager software with the Cerner PowerChart system, the combined IBM team used the Health Level 7 (HL7) standard, the predominant open standard in the healthcare industry for integrating information and applications.

By integrating the Cerner EMR solution with DB2 Content Manager software from IBM, Memorial improved the efficiency of its health records which in turn improved the delivery of care. Staff can now access pertinent patient information quickly and easily, whenever it's needed. The solution enables the hospital to offer better quality of care, reduce risk and comply more easily with regulations regarding release of information. The solution also:

- *Reduces costs by eliminating manual paper-handling processes and mitigating the costs of potential litigation.*
- *Helps to make the overall EMR system more complete.*
- *Accelerates the hospital's return on investment for the new EMR system.*

"The main reason that we have partnered with IBM has to do with the robust infrastructure it can bring to the table," says Kerwin. "IBM does more R&D than its competition, which allows it to deliver more products that meet our needs. Also, IBM has delivered on its vision of open standards-based solutions, which has enabled us to serve our communities with prompt, authoritative information of the highest quality that can be easily accessed."

### **For more information**

Please contact your IBM sales representative or IBM Business Partner.

Visit our Web sites at:

- [ibm.com/healthcare](http://ibm.com/healthcare)
- [ibm.com/db2](http://ibm.com/db2)
- [ibm.com/software/genservers/portal](http://ibm.com/software/genservers/portal)

You can get even more out of Information Management software by participating in independently run Information Management User Groups around the world. Learn about opportunities near you at [ibm.com/software/data/usergroup](http://ibm.com/software/data/usergroup)

For more information on Memorial Health System, visit: [www.memorialhealthsystem.com](http://www.memorialhealthsystem.com)



© Copyright IBM Corporation 2006

IBM Corporation  
Software Group  
Route 100  
Somers, NY 10589  
U.S.A.

Produced in the United States of America  
10-06  
All Rights Reserved

DB2, IBM, the IBM logo, System i, System p and WebSphere are trademarks of International Business Machines Corporation in the United States, other countries or both.

This case study is an example of how one customer uses IBM products. There is no guarantee of comparable results.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.



# Montana Department of Administration Information Technology Services Division

---

## Overview

---

### ■ **Business Challenge**

*Reliance on paper and microfilm made it difficult to provide secure access to a growing number of records and other documentation to multiple parties in varying departments or offices in a timely manner.*

### ■ **Solution**

*A single imaging and content management solution capable of providing enterprise-wide, consistent access on a common, scalable infrastructure that enables communication and connectivity across highly dissimilar applications and technologies.*

### ■ **Key Benefits**

- *Enabled agencies to streamline internal processes and share information*
- *Improved citizen services by providing quicker access to records*
- *Removed the reliance and paper and microfilm*

The State of Montana's Department of Administration (DOA) strives to deliver superior and responsive Information Technology (IT) services to Montana's government agencies, employees, and citizens while minimizing costs and maximizing effectiveness. These IT services are managed and operated at an enterprise level by the DOA's IT Services Division (ITSD). ITSD, a not-for-profit division within DOA, maintains Montana's enterprise-wide computing environment, the largest technology infrastructure in the state, and facilitates agency compliance with state-mandated technology acquisition standards and policies. The services provided by ITSD support the reliability, security, and cost-efficiency of Montana's IT infrastructure, while also ensuring the business requirements of state agencies are met.

### **The Challenge**

Like many state government departments and agencies, Montana state government used paper and microfilm-based document management and record keeping systems. As a result, agencies faced challenges securing access to state records and other documentation in a timely fashion – the same documents are often required for use at the same

*“What we found overall is that the FileNet ECM solution is stable, very reliable and that the image solutions run like clockwork.”*

– Nan Chambers  
IT Business Systems Analyst  
Computing Technology Services  
Bureau

time by multiple parties in varying departments and offices – and public access to these materials was nearly impossible considering the difficult to view document formats. Citizen service also suffered due to these challenges, as the outdated document and records management systems hindered state representatives' abilities to provide rapid response to inquiries.

Rather than implement new systems in each department and agency, Montana sought to deploy a single enterprise-wide system to provide access across state departments in Helena and remote facilities. The state desired an imaging and content management solution capable of providing enterprise-wide access on a common infrastructure. Additionally, DOA wanted to leverage the combined



---

**Montana Department of  
Administration, Information  
Technology Services Division**

---

*Headquarters*

- Helena, Montana

*Industry*

- State Government

*Product*

- FileNet Enterprise Content Management
- 

purchasing power of all state departments and agencies to make the solution more affordable for smaller agencies with lower budgets.

To help guide procurement of the new system and ensure the selected provider/design met both the requirements common across departments and those unique to individual agencies, DOA established an inter-agency steering committee comprised of ITSD representatives and qualified IT staff from multiple agencies. After evaluating all options, the committee determined that the state required a scalable, flexible, Commercial Off-The-Shelf (COTS) software solution that offered a role-based Web interface to afford both government agencies and Montana citizens access to records as appropriate.

**The FileNet Solution**

In order to ensure achievement of stated objectives, ITSD required a solution capable of overcoming challenges inherent in Montana's current operating environment:

- With agencies and offices located across the state, Montana needed a solution that provided consistent access regardless of geographic location
- With a single system supporting diverse departments and agencies, Montana required a solution that enabled communication and connectivity across highly dissimilar applications and technologies, and provided a clear path for upgrades
- Lastly, the solution suite had to be simple and easy enough to implement workflow and scanning, but robust enough to provide for complex customer needs and future growth

ITSD evaluated multiple leading image and content management solutions providers during its search for a document and records management system that could meet business objectives and operate in the state's complex IT environment. The ITSD team identified FileNet as the best-fit solution – capable of addressing Montana's existing needs with sufficient scalability to grow with the state's evolving requirements.

Montana implemented its FileNet ECM solution on a shared infrastructure, distributing costs equitably among participating departments and agencies. ITSD began rollout of FileNet ECM in DOA – testing and tuning the system first in its own parent department before allowing access by other agencies. "Today, we are starting to see a lot more initiatives from the agencies who see that the FileNet ECM solution is simply good solid technology," said Nan Chambers, IT Business Systems Analyst, State of Montana Department of Administration. As agencies contact ITSD to bring FileNet online in their respective agencies, ITSD first holds

planning meetings to understand current processes for document handling and agency-specific goals to ensure a seamless transition to the new system.



### The Bottom Line

Today, the FileNet ECM suite of solutions is in place and operational at 12 state agencies, including the Office of Public Instruction, Boards of Housing and Investments, as well as the Departments of Labor, Corrections, Justice, and Natural Resources. The system enables agencies to streamline internal processes, efficiently manage content, and improve citizen service – automating previously tedious, time-consuming, paper-based processes using business process management. For example, FileNet electronic forms and business process management solutions helped improve the Department of Corrections Inmate Grievance Program by putting business processes in place to automate grievance routing to appropriate personnel for resolution.

“What we found overall is that the FileNet ECM solution is stable, very reliable and that the image solutions run like clockwork,” noted Chambers. The FileNet ECM suite is now an integral part of the state of Montana’s IT architecture plan – providing scalability to address emerging requirements in the years to come.

Additionally, ITSD is working to extend the availability of its FileNet platform to county and municipal government agencies across the state. As these organizations come online, document sharing across all levels of government will significantly improve – increasing efficiencies for collaborating agencies such as the state Department of Justice and local police jurisdictions.

© Copyright FileNet, an IBM Company 2007

FileNet, an IBM Company  
3565 Harbor Boulevard  
Costa Mesa, CA 92626-1420  
USA

Printed in the USA

01-07

All Rights Reserved.

IBM and the IBM logo are trademarks of IBM Corporation in the United States, other countries or both. FileNet and its respective logo are registered trademarks of FileNet Corporation in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

For more information, visit the FileNet Web site at [www.filenet.com](http://www.filenet.com)

# NFL tackles digital content challenges to build a foundation for growth and diversification.

## Overview

### ■ **Business Challenge**

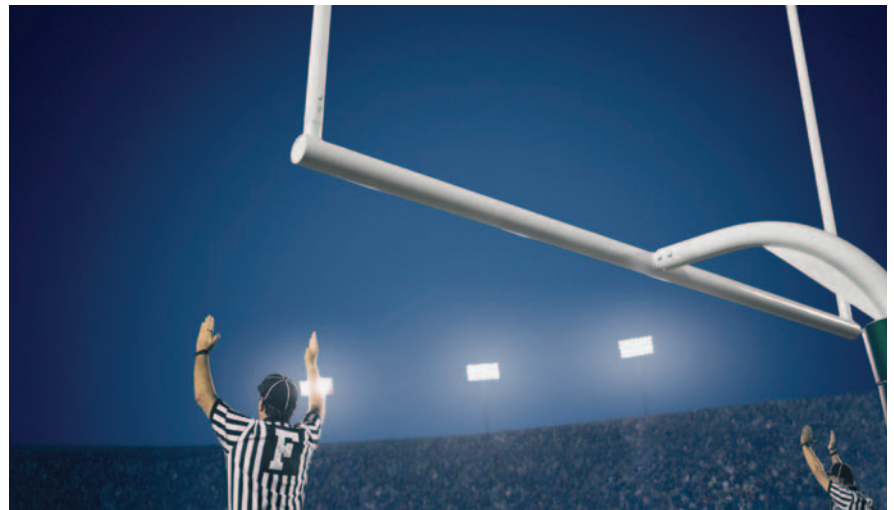
*The NFL's ambitious broadcasting and programming plans required the flexibility to distribute its content through new ventures, channels and programs. To improve its ability to capitalize on new media opportunities and digital content partnerships, the NFL needed to reinvent its systems and processes.*

### ■ **Solution**

*The NFL engaged IBM to build a digital content management and distribution system that streamlined the way NFL Films ingests, stores, accesses and distributes its content.*

### ■ **Key Benefits**

- *Improved ability to leverage and monetize the underlying value of NFL content*
- *Improved ability to support new programming outlets, such as shows on the NFL Network*



*The National Football League (NFL) is the organization behind America's most popular spectator sport, and NFL Films is the league-owned media production company that has long been its main promotional channel. This season, the NFL Network is broadcasting eight NFL games, marking an expansion of its media activities.*

Nearly nine decades after its founding, the National Football League (NFL) has never been more popular. Attendance, viewership and television revenue are at or near all-time highs, and the strength of the NFL as a global brand has never been greater. Sure, the players seem to always get better, the games more exciting and the presentation slicker. But that's just one side of the striking success of the NFL. The bigger story lies behind the scenes, in the strategies, tactics and programs the NFL has followed in its careful, diligent—and above all ambitious—stewardship of the league.

*“Our new digital media solution puts the NFL in a great position to capitalize on a huge array of content opportunities... The quality and performance of our solution attests to our view that when it comes to digital media management, IBM is second to none.”*

— Joe Manto, VP of IT,  
National Football League

### Business Benefits

- Significantly reduced video production cycle times through advanced digital search and editing capabilities
- More robust and compelling video content on existing media outlets
- Improved ability to capitalize on new media opportunities and digital content partnerships
- Strengthening of the NFL brand globally
- Improved ability to leverage and monetize the underlying value of NFL content
- Improved ability to support new programming outlets, such as games on the NFL Network

The NFL is more than a collection of franchises, players, coaches and owners. It also generates and owns some of the most sought after entertainment content in the world.

### Going deep

Like any successful media and entertainment company, the NFL strives to extract the most value from its media assets, the core of which is an archive of video and audio clips established and maintained by its affiliated media company, NFL Films. Established in the early 1960s, NFL Films gained renown for the quality, depth and completeness of its game footage, as well as a reverence for the game that permeates its film product—all one hundred million feet of it, and counting. It is the NFL's most important promotional channel. Operating out of a new 200,000-square-foot, state-of-the-art studio in Mount Laurel, New Jersey, NFL Films produces television programs such as "Playbook" as well as "State Farm NFL Matchup." It is through such programs that NFL Films represents the face of the NFL, which is why the quality and richness of the content it produces is so important.

Even with its prime assets, the NFL still faces the media industry's fundamental challenges—the need to make content as compelling as possible and make the production and distribution of that content as efficient as possible. Moreover, with the media marketplace more crowded and competitive than ever, NFL Films needed the flexibility to distribute its content through new ventures, channels and programs as new opportunities arose. At a technical level, this means the ability of NFL Films to manage content throughout its lifecycle, from the time it's recorded, through editing, broadcast and archiving.

Some of the raw game footage acquired each week is videotape shot by the teams for use by coaches and players. For "X's and O's" programs like "Playbook" to incorporate desired segments of this footage—featuring a particular player or situation—production staff members had to conduct a manual, time-consuming search that involved scanning through printed game books, indexing plays to particular videotapes and conducting a linear review of reels of videotape to find them. Storage was another problem. While NFL Films did digitize this game footage, this content remained in digital format for only a short time due to storage limitations, reverting to analog format for longer term storage.

*“Demand for NFL content is strong and getting stronger. We needed to improve our ability to capitalize on this demand—and to build a foundation for doing so into the future.”*

— Joe Manto

Poised to grow its programming activities and leverage its brand, the NFL realized that it needed to reinvent the way it managed some of its valuable assets. Where an existing process was linear, restrictive and bottleneck-prone, it sought to deploy a process that was common, flexible and intelligent. By streamlining the way NFL Films ingests, stores, accesses and distributes the coaching footage used in several programs, the NFL sought to put in place a foundation for it to expand its activities while making its programming richer and more robust. The “foundation” metaphor was also apt because it was essential that NFL Films’ existing production processes—which were well-tuned and proven—would need to sit atop and interface with the new content management processes. The NFL engaged IBM to help it realize this vision.

### Reinventing the production flow

Led by IBM Global Business Services, the IBM team conducted a diagnostic analysis of the NFL’s content assets and process flows to catalog content and to identify and map opportunities for process improvement. Having identified over 100 different kinds of content created daily by the NFL, the team turned its sights on process transformation. As a first step, the NFL and IBM selected the TV programs “State Farm NFL Matchup” and “Playbook” as the proving ground for the new solution. IBM conducted a detailed mapping of the process flows affecting these programs, and from it fundamentally streamlined—and redefined—the way content was handled throughout the production process.

The key difference is the intelligence, flexibility and automated capabilities of the new approach. At the front end of the process, for instance, videotape is now ingested, digitized and indexed with metadata at the outset, thus eliminating the endemic need to repeatedly copy tapes. With rich metadata appended to its digital game footage, production staff looking for footage can apply sophisticated queries to quickly locate game situations of interest. Once production staff find the content, they create a playlist that is automatically shipped in digital form to the production editors who assemble the show. The fact that production staff can now apply creative searches in the place of linear videotape review percolates directly upward in the process, since it enables producers and editors to deliver more compelling content, and the programs’ hosts to provide more insightful analysis. This solution ultimately reduced the time associated with the search and retrieval of critical game footage used in the production of the programs, made editing ten times faster and quadrupled programming output.

## Key Components

### Software

- IBM DB2®
- IBM DB2 Content Manager
- IBM WebSphere® Application Server
- IBM Tivoli® Storage Manager
- Ancept Media Server

### Hardware

- IBM BladeCenter®
- IBM System p™
- IBM System x™
- IBM TotalStorage® LTO Tape Drives

### Services

- IBM Global Business Services

### Business Partner

- Ancept

### Time frame

- Upfront diagnostics and solution planning: 6 months
- Pilot deployment: 4 months
- Expanded deployment: Ongoing

## Why it matters

*The communications business is in the midst of a quiet revolution known as “convergence.” Advances in multi-media technology and standards will enable the distribution of rich multi-media content through almost any kind of device or medium. With demand for premium content expected to skyrocket, content owners like the NFL have a golden opportunity to distribute their content—such as video game clips—through wireless, cable and other types of service providers. With NFL fans looking to view their favorite game clips whenever and wherever they want to, the NFL’s new digital content management solution will enable it to deliver truly on demand content—the wave of the future.*

Making it all possible is a centralized digital media management and distribution solution the NFL calls Digital Foundation. At the heart of the solution is IBM DB2 Content Manager which—together with Ancept Media Server at the front end—provides its core content management capability. Both run on IBM WebSphere Application Server, which provides a secure, scalable runtime environment for the content management solution. IBM BladeCenter blade servers provide the hardware foundation for content management functions. IBM Tivoli Storage Manager, used to manage an IBM TotalStorage storage area network (SAN), runs on an IBM System p server, as does IBM DB2, which manages the NFL's inventory of digital assets. To handle the heavy processing load required for the rapid ingest of videotape-based content, the solution employs a number of IBM System x servers.

### Ready for the future

With ambitious growth and diversification on its agenda, the NFL couldn't have picked a better time to put in place a first-class content management capability. Take for example its recent—and groundbreaking—decision to become the exclusive broadcaster of several NFL games through its NFL Network affiliate. By extending its business model from being a content source to a content outlet, the NFL has taken on a whole new set of challenges, not the least of which is the need to provide large amounts of targeted and relevant content to enrich the broadcasts and meet high viewer expectations.

The NFL is also well positioned to capitalize on the broader opportunities arising from the expanded use of wireless devices to download premium multimedia content. Communications service providers, now investing in the networks needed to deliver it, will need sources of high-quality video and audio content to satisfy their customers. The NFL, with a super-efficient means of accessing and delivering its huge base of content—from clips to scores to programs—is poised to deliver, further strengthening the NFL brand around the world.

Joe Manto, VP of IT for the NFL, sees the league's investment in the Digital Foundation platform as critical to the success of both initiatives, and a key enabler of others down the road, from the addition of new channels to partnerships with other content and media companies. "Our new digital media solution puts the NFL in a great position to capitalize on a huge array of content opportunities," says Manto. "It's given us the means to produce and distribute more robust content, and do so more efficiently, which ultimately supports the brand and the mission of the NFL. The quality and performance of our solution attests to our view that when it comes to digital media management, IBM is second to none."

### For more information

Please contact your IBM sales representative or IBM Business Partner.

Visit us at:

[ibm.com/innovation](http://ibm.com/innovation)



© Copyright IBM Corporation 2006

IBM Corporation  
Global Solution Sales  
New Orchard Road  
Armonk, NY 10504  
U.S.A.

Produced in the United States of America  
12-06  
All Rights Reserved

IBM, the IBM logo, ibm.com, BladeCenter, DB2, System p, System x, Tivoli, TotalStorage and WebSphere are trademarks of International Business Machines Corporation in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.

This case study illustrates how one IBM customer uses IBM products. There is no guarantee of comparable results.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

# Portugal Telecom

---

## Overview

---

### ■ **Business Challenge**

*Improve the efficiency of its operations by unifying business processes and implementing a single IT platform.*

### ■ **Solution**

*A user-friendly Enterprise Content Management system tightly integrated with SAP R/3, responsible for redefining, modeling, implementing, automating and controlling a total of 157 business processes.*

### ■ **Key Benefits**

- *High operational efficiency*
- *Reduced operational risk*
- *Improved profit margins*
- *Unified business processes*

### **The Business Challenge**

Like many other telecom operators, Portugal Telecom (PT) faces pressure from factors such as intensifying competition and shrinking wireline revenues. It has responded to this pressure in several ways, among them a major expansion of its mobile and broadband businesses. It has also engaged in a strong drive to improve the efficiency of its operations.

One specific area identified as offering great potential for improvement was the consolidation of back-office operations among the different companies within the group. PT decided to establish a shared services centre, PT Pro, offering business support services to these companies in the areas of finance, accounting, resource management, asset management, logistics and human resources.

PT SI is the IT solution provider to the PT Group as a whole, as well as to other external organizations. It won FileNet's Best ValueNet Partner Award in 2003 and two Most Innovative Solution Awards in 2004.

"The main challenge was to unify the business processes involved

*"The FileNet P8 architecture offers many advantages in terms of sophisticated workflow capabilities and support for a universal document repository. We regard our FileNet solution as highly innovative because of its ability to unify and manage a wide range of business processes."*

– Nuno Baptista  
Project Leader, PT SI

and implement a single IT platform to support them," explained Nuno Baptista, PT SI. "There was also a need to re-engineer the processes with a view to streamlining and automating them for improved efficiency."

PT set out to develop a unified business process management (BPM) and workflow platform that would combine ease-of-use with robustness and efficiency, while enabling tight control of all processes.

## Portugal Telecom

### Geography

- 17 domestic companies and a strong presence in international markets, especially Brazil

### Industry

- Telecom

### Products

- FileNet Business Process Manager
- FileNet Capture
- FileNet Content Manager
- FileNet Process Analyzer
- FileNet Process Simulator

### Benefits

- High operational efficiency
- Reduced operational risk
- Improved profit margins
- Unified business processes

## The Solution

PT decided to base its new consolidated solution on FileNet P8 in combination with SAP R/3. SAP was already the core business software across the group, while several PT companies had already implemented FileNet solutions in the wake of a decision to adopt FileNet as the enterprise content management (ECM) standard for the group.

Existing SAP and FileNet solutions were consolidated into a single customized solution, which is responsible for modelling, implementing, automating and controlling a total of 157 business processes. They range from changing employees' HR data to approving invoices. In total, the system has some 2,000 end-users.

PT employees who use the solution do so from within their own business processes by means of a user-friendly workflow interface. All information and documents related to the process in question can be securely accessed using this interface. To submit any request that needs to be supported by a physical document, the employee simply sends the document to be scanned. This action automatically launches the appropriate workflow.

## Implementation and Technology

The redefinition of business processes marked the first stage in implementation. Most of the work was done internally by PT, but Accenture was engaged to help with finance and accounting processes. According to Baptista, the main challenges were to develop a suitable workflow interface within the limited time available, and to build a security model appropriate to the entire range of business processes.

The new solution, known as ProUno Workflow, was rolled out in phases, beginning with 36 business processes within the largest company in the PT Group. Additional companies and processes were then added over a 15-month period, during which the functionality of the solution was also expanded. At the outset, there were almost 50 people in the project team, but this number was later reduced by half.

The new, re-engineered business processes are managed using FileNet workflow. The workflow brings together SAP R/3, SAP Workflow, SAP Portal, Ebydos Cockpit, and Readsoft Eyes & Hands Invoices. All systems are tightly integrated, with work items in FileNet workflow being synchronized with those in SAP Workflow.

FileNet Process Analyzer and Process Simulator are used to monitor and manage service level agreements (SLAs) between PT Pro and the companies it serves. The production environment for the solution is based on ten servers running Windows 2000 Advanced Server with Microsoft SQL Server 2000.



## The Results

Tight integration among different systems enables ProUno Workflow to support a very high level of automation.

“All the data captured from scanned documents such as invoices is automatically delivered to SAP, where it is available for viewing across the PT Group,” said Baptista. “However, the original paper invoices never leave the central operations centre and there is no more need to copy them or circulate them within and among companies. The savings in time and effort are substantial.”

Thanks to the workflow interface, users working for PT companies everywhere in Portugal are able to seamlessly initiate and participate in a business processes through FileNet Business Process Manager (BPM). They can view and mark up every document that the business process is using.

Because business processes common to several different companies are now handled using just one system, IT-related costs have been cut substantially. Human resource requirements have also been reduced, especially given that the new processes are so highly automated. Overall, therefore, there has been a large reduction in the time and effort allocated to HR, accounting and other processes across the group. At the same time, the rigorous workflow process and the existence of a universal document repository minimize the scope for loss and error.

## The Business Benefits

The FileNet system has contributed in a major way to the economies of scale achieved by PT through the PT Pro shared services initiative. Higher operational efficiency and reduced operational risk are amongst the most important benefits experienced by the business as a whole.

In combination with other cost rationalization efforts carried out across the group, PT Pro helped PT's domestic business to improve its profit margins (as measured by EBITDA) by 2.1 percentage points in 2004. Further improvements are expected in the future.

“The FileNet P8 architecture offers many advantages in terms of sophisticated workflow capabilities and support for a universal document repository. We regard our FileNet solution as highly innovative because of its ability to unify and manage a wide range of business processes,” concluded Baptista.



© Copyright FileNet, an IBM Company 2007

FileNet, an IBM Company  
3565 Harbor Boulevard  
Costa Mesa, CA 92626-1420  
USA

Printed in the USA

01-07

All Rights Reserved.

IBM and the IBM logo are trademarks of IBM Corporation in the United States, other countries or both. FileNet and its respective logo are registered trademarks of FileNet Corporation in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

For more information, visit the FileNet Web site at [www.filenet.com](http://www.filenet.com)

The IBM home page on the Internet can be found at [ibm.com](http://ibm.com)

## State of North Dakota

---

### Overview

---

#### ■ **Business Challenge**

*To provide citizen services to a dispersed population without sacrificing the needed service-level improvements and operating efficiencies due to its limited budget.*

#### ■ **Solution**

*Implemented FileNet P8 to store a wide variety of records and information, ranging from unemployment applications and vehicle registrations to tax filings and flexible benefit records.*

#### ■ **Key Benefits**

- *Streamlined filing and management of tax returns reduced paper storage requirements*
- *Improved access to records minimized the amount of time required to process returns*
- *Realized complete payback on the system in the first six months*

North Dakota, a state rich in historical pride, had its unique beginnings with the Lewis and Clark expedition. While the state maintains its unique heritage, North Dakota's state government shares in the challenges faced by many other states – keeping up with a continually growing volume of information and records. Everyday document storage and retrieval was an increasingly difficult task with paper files filling storage locations. Today, however, with the help of FileNet Enterprise Content Management (ECM) solutions, North Dakota is revamping its systems for retaining and accessing records by implementing a centralized electronic archive that provides easy access to records and allows the state's agencies to deliver improved service to its internal and external customers.

#### **The Challenge**

While North Dakota's population is smaller than that of most other states, it faces unique challenges in providing citizen services. Its population of 650,000 is dispersed over a wide geographic area. Working to address these citizens' needs while managing the state's records presented a significant challenge for North Dakota government agencies. Most utilized

*“We selected FileNet because of its position in the marketplace and the number of business solutions that are integrated with the FileNet platform. FileNet partners provide robust solutions that are fully integrated with the FileNet ECM solution, significantly reducing our need to create and manage custom code.”*

– Bill Roach  
Enterprise EDMS Coordinator  
ITD/Records Management  
State of North Dakota

paper-based means to store, catalog, and retrieve records. These systems were increasingly unable to support the state's growing collection of citizen, business, and internal records.

Notably, the Office of the State Tax Commissioner was rapidly running out of storage space in its capitol storage facility. It faced the immediate challenge of significantly increasing

---

## State of North Dakota

---

### Headquarters

- Bismarck, ND

### Industry

- State Government

### Products

- FileNet Business Process Manager
- FileNet Content Manager
- FileNet Image Manager
- FileNet Records Manager
- FileNet Records Crawler

### Benefits

- Realized significant economies of scale
  - Increased operating efficiencies
  - Improved services
  - Reduced overhead expenses
- 

spending to manage the growing quantity of records. This, combined with information from other departments facing similar challenges, clearly identified the need for the state to find a comprehensive solution.

With the Tax Department's immediate requirement in mind, the state embarked on an information management modernization effort by seeking to deploy a solution that would provide statewide document management. Rather than implementing multiple systems on a single platform, the state sought to implement a single system that would provide access to records across state departments and locations. Further, with a centralized approach, the state would be able to optimize its limited budget without sacrificing the needed service-level improvements and operating efficiencies.

### The Solution

As North Dakota reviewed options, it first looked internally at agencies that had deployed a variety of imaging and document management solutions from several solution providers, including FileNet. The State decided to leverage the successful implementation of FileNet's industry leading Image Services (IS) in Workforce Safety and Insurance. The first step toward a single FileNet system capable of serving all departments and agencies within North Dakota was leveraging the existing relationship between FileNet and the State. Actual design and deployment was done through a partnership between the Information Technology Department and the Office of the State Tax Commissioner.

"We selected FileNet not only because of its basic capabilities, but because of its position in the marketplace and the number of business solutions that are integrated with the FileNet platform," said Enterprise EDMS Coordinator Bill Roach. "Other products provide API's. FileNet partners provide robust solutions that are fully integrated with the FileNet ECM solution, significantly reducing our need to create and manage custom code."

North Dakota subsequently implemented FileNet's P8 platform in additional departments and agencies as interest grew and time and budget allowed. Today, FileNet is the enterprise standard for document management for the entire State of North Dakota. FileNet is in use within 12 agencies across North Dakota, including the Departments of Commerce, Taxation, Transportation, Human Services, and Secretary of State. The system stores a wide variety of records and information, ranging from unemployment applications and vehicle registrations to tax filings and flexible benefit records. To further capitalize on the unique benefits offered by a single enterprise platform, North Dakota is working to link county employees to the system – enabling critical information sharing between agencies at both the state and local levels.

Examples of the FileNet system at work in North Dakota include:

- The Office of State Tax Commissioner utilizes FileNet to streamline filing and management of tax returns – reducing paper storage requirements to a minimum, significantly improving access to records, and decreasing the amount of time required to process returns.

- The North Dakota Secretary of State's office retains Uniform Commercial Code (UCC) filings in FileNet P8's storage repository. Work is in progress to extend the repository to County Recorders, allowing them to scan and store UCC images in the central image database. When this extension is complete, it will significantly improve state-to-county and county-to-county record access and eliminate the need for each county to retain its own records, creating savings at that level of government as well.
- North Dakota's Department of Human Services Child Support Enforcement scans child support remittals and makes them available for use by regional office staff. When a project to provide a FileNet-based solution for judicial records is completed, Clerks of Courts will also have access to child support payment information – enabling rapid identification of late or missing payments.



© Copyright FileNet, an IBM Company 2007

FileNet, an IBM Company  
 3565 Harbor Boulevard  
 Costa Mesa, CA 92626-1420  
 USA

Printed in the USA

01-07

All Rights Reserved.

IBM and the IBM logo are trademarks of IBM Corporation in the United States, other countries or both. FileNet and its respective logo are registered trademarks of FileNet Corporation in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

For more information, visit the FileNet Web site at [www.filenet.com](http://www.filenet.com)

### The Bottom Line

The North Dakota system is yet another example of how standardizing on FileNet P8 enables departments and agencies in state governments to share information and incrementally improve services by building business-specific solutions as conditions and resources allow.

“With our enterprise-wide system, we realize significant economies of scale – a critical requirement for a state operating on a limited budget,” said Roach. “As a result, files and content can be shared across departments and agencies without the requirement for additional systems integration. For example, Tax Department staff has direct access to Department of Motor Vehicle records required to ensure compliance with sales tax requirements.”

Today more than 1,400 state employees across 12 departments and agencies perform their daily work tasks using the FileNet system. That number is expected to increase by several hundred additional users as the Judicial Branch comes online. Roach notes that interest from agencies across the state continues to grow, “Those who use FileNet today want more, and those that don't are waiting in line to get it. More users and applications are constantly coming on board.”

As a result of standardizing on FileNet, North Dakota enjoys increased operating efficiencies, improved services, and a reduction in overhead expenses. For example, the payback for implementing FileNet in the Public Employees Retirement System was achieved in only six months. The Tax Department eliminated the need for a second shift during the income tax processing season. And traffic citations are automatically indexed and stored in the FileNet system and work objects routed, as information is passed from the court to the assigned worker in North Dakota Department of Transportation's Driver Improvement Service division for processing. “A question from a taxpayer, citizen or business can now be answered while the caller is still on the phone, greatly improving communications with our customers,” said Roach.

## Texas A&M University

---

### Overview

---

#### ■ **Business Challenge**

*The Texas A&M Division of Finance was faced with the complex challenge of managing millions of division records efficiently while complying with federal regulations and Texas state law.*

#### ■ **Solution**

*FileNet P8 brings content and business processes together to facilitate and accelerate information exchange triggered by business or transactional events.*

#### ■ **Key Benefits**

- *Achieved cost-effective records management enforcement and compliance*
- *Reduced risk of audit failures as a result of automated management of records lifecycle*
- *Lowered operational costs through reduced storage and discovery expenses*
- *Improved productivity by automating routine tasks, enabling staff to focus on departmental activities*

Texas A&M University is a distinguished land-grant, sea-grant and space-grant higher education institution located in College Station, Texas. The university is centrally located, equidistant from three of the 10 largest cities in the United States (Houston, Dallas and San Antonio) and the state capitol (Austin). The university's enrollment includes 44,000 students studying for degrees in 10 academic colleges.

Texas A&M University, highly regarded for its agricultural expertise, is dedicated to the discovery, development, communication, and application of knowledge in a wide range of academic and professional fields. Its mission of providing the highest quality undergraduate and graduate programs is inseparable from its mission of developing new understandings through research and creativity. Texas A&M prepares students to assume roles of leadership, responsibility, and service to society. In the twenty-first century, the university seeks to assume a place of preeminence among public universities while respecting its history and traditions.

#### **The Challenge**

Stephen Chambers, Ph.D. and Assistant Director of Texas A&M University's Finance Division Computing Group, was faced with

*“FileNet Records Manager provides us with the ability to automatically tag every record upon receipt. Now, there will be no doubt about policy compliance.”*

– Dr. Stephen Chambers, Ph.D.  
Assistant Director  
Finance Division Computing Group

the complex challenge of managing millions of division records efficiently while at the same time, complying with federal regulations and Texas state law.

Office managers, division heads and staff already followed a well-defined records retention schedule which helped keep them heading down the right track, but having a well-defined schedule didn't prevent human errors, ensure legislative compliance, and/or optimize resources. Most records were still kept in physical boxes and stored in a central library. Each year, records managers spent hundreds of hours visiting the storage library to sift through boxes and determine which records required continued storage and which could be disposed of. Although the university provided training relative to defining a record,

---

## Texas A&M

---

### Headquarters

- College Station, TX

### Industry

- Education

### Application

- Records Management

### Products

- FileNet Business Process Manager
- FileNet Content Manager
- FileNet Records Manager

### Benefits

- Automated legislative compliance
  - Significantly lowered operational costs
  - Reduced risk of policy audit failures
  - Improved productivity by automating routine tasks
- 

where records should be filed, and how long they should be kept, the training could not assure consistent records management decision making.

Dr. Chambers and his team identified several common deficiencies in the university's existing records management system including:

- Excessive man hours required to capture and manage records
- Audit failure risks resulting from lost records and difficulty in proving policy adherence
- Legal liabilities resulting from human error (misfiling, lost files, etc.)
- Delayed or missed policy and retention schedule updates as a result of human management

They knew automation would be a key enabler to significantly improve their records management system, so they sought out a technology solution to help optimize their efficiency in a seamless manner.

### The Solution

In early 2005, Texas A&M's Division of Finance evaluated several records management software solutions and quickly settled on FileNet Records Manager. With a FileNet ECM platform already in place, FileNet Records Manager was the natural next step in automating and streamlining records-based activities at the university.

Dr. Chambers was particularly impressed by FileNet ZeroClick technology, an innovative solution designed to use process, events, rules and meta data to invisibly enforce policy throughout the entire records and information lifecycle. This solution not only helps Texas A&M's Division of Finance to ensure best-practice records capture and administration, it also minimizes the impact on staff - improving productivity, eliminating errors, and reducing costs. Another major advantage is the assurance that employees use the technology because it's integrated into their daily work routines and invisibly enforced.

FileNet ZeroClick helps Texas A&M's Division of Finance bring content and business processes together to facilitate and accelerate information exchange triggered by business or transactional events such as the filing of an electronic document into a folder, or internal and external system events, including updating policy documents or receiving a transaction from another system.

## Managing Office Records

Texas A&M's Division of Finance, with the help of FileNet Professional Services, is now integrating the FileNet Records Manager solution into the following University operations:

- Financial Managed Services (Accounts Payable/Receivable/Inventory)
- Contract Administration
- Student Business Center
- Aggie-Card Office
- Strategic Sourcing and Logistics (Purchasing Services)
- Senior Vice President for Finance and CFO Office
- Office of Budget and Analytical Services
- Employee Services
- Food Services

Deploying FileNet ECM across these operations enables the University to free up massive amounts of physical storage space, as well as refocus its manpower on more productive activities. And it gives university staff confidence they're conforming to federal and State of Texas requirements. According to Dr. Chambers, "FileNet Records Manager provides us with the ability to automatically tag every record upon receipt. Now, there will be no doubt about policy compliance."

### Key Benefits

As a result of its FileNet Records Management implementation, Texas A&M's Division of Finance:

- Achieved cost-effective records management enforcement and compliance
- Reduced risk of audit failures as a result of automated management of records lifecycle
- Lowered operational costs through reduced storage and discovery expenses
- Improved productivity by automating routine tasks, enabling staff to focus on departmental activities



© Copyright FileNet, an IBM Company 2007

FileNet, an IBM Company  
3565 Harbor Boulevard  
Costa Mesa, CA 92626-1420  
USA

Printed in the USA

01-07

All Rights Reserved.

IBM and the IBM logo are trademarks of IBM Corporation in the United States, other countries or both. FileNet and its respective logo are registered trademarks of FileNet Corporation in the United States, other countries or both. All other company or product names are registered trademarks or trademarks of their respective companies.

For more information, visit the FileNet Web site at [www.filenet.com](http://www.filenet.com)

The IBM home page on the Internet can be found at [ibm.com](http://ibm.com)

## U.S. Army targets saving billions of dollars in processing costs with new forms-automation solution from IBM

IBM Business Partner Enterprise Information Management provides program, technical analysis and develops ROI plan



soldiers locate, download, store and fill out forms. But the last mile in the process was the same: the form needed to be printed, signed and routed through the traditional approval processes. In addition, the Army was looking for a way to use its forms-based processes to create an enterprise-wide backbone to automate many business processes with a single, Internet-based solution.

### Overview

#### The Challenge

*The paper-based forms system the U.S. Army utilized could no longer handle the speed and flexibility required in the field*

#### The Solution

*The Army chose to re-engineer its processes with IBM Workplace Forms™ and other IBM middleware, hardware and software, plus the program and technical analysis provided by Enterprise Information Management*

#### The Benefit

- *Estimated total savings of US\$1.3 billion annually in administrative processing costs*
- *Anticipated improvements in Army field efficiency*
- *Projected one-third less time required to fill out forms*

With a mandate to protect freedoms and to preserve the peace, effective and rapid decision making is of paramount importance to the U.S. Army. Thousands of decisions are made daily—from supply orders to medical, logistical, transportation and personnel matters.

Those decisions can't be implemented until they are properly authorized. And for centuries, the best way to confirm that authorization was with a signature on a paper form.

But that paper-based system can no longer handle the speed and flexibility that is required in the field today. Not to mention the costs and exposures of maintaining such a labor-intensive workflow.

The Army already had converted the front-end of that traditional process with computer-produced dynamic documents that helped

As a result, the Army chose to completely re-engineer its forms-based business processes with an integrated forms management solution using IBM Workplace Forms, along with middleware and hardware from IBM and software from Silanis Technology, Inc.

*“With outstanding IBM resources.... EIM can provide better quality and more responsive support to our customers and be more agile in a growing global marketplace.”*

Bruce Lyman, chief executive officer, Enterprise Information Management



## Solution enables soldiers in field and in offices to make decisions quicker on everything from supply orders to personnel matters

### Benefits

- Anticipated total savings of \$1.3 billion annually in administrative processing costs when the system is fully automated
- Projected improvement of Army efficiency in the field, as well as reduced exposure to enemy fire in transporting paper forms
- Users of the system are projected to save about one third of their time required to fill out forms when the system is fully automated

Enterprise Information Management (EIM), an IBM Business Partner, headquartered in Arlington, Virginia, helped make the solution successful by performing program and technical analysis, developing a five-year program budget and return on investment plan and assisting with hardware and software acquisition.

The Army has an inventory of more than 100,000 different types of forms, used by about 1.4 million Army personnel around the world. Many of the forms will be converted to an e-forms process that enables digital signing, as well as transmission and approval of forms over the Internet.

The new forms program is expected to save \$1.3 billion annually in administrative processing costs alone when the system is fully automated—to say nothing of making Army personnel more efficient, productive and responsive. For the first time, the Army will have a single, centralized format for electronic documents based upon open standards.

“The Forms Content Management Program will not only provide fillable forms, storage of data, and enable a form to be pushed from PC to PC using digital signatures, the program will also provide the U.S. Army the means to develop one single enterprise solution for automating functional business processes for the entire Army’s use,” said Jeanne Harman, chief of the Army Publishing Division, in Alexandria, Virginia.

### Productivity gains

The implementation of XML electronic forms with digital signatures promises to improve efficiencies of Army personnel in the field. XML stands for Extensible Markup Language and is a specification designed especially for Web documents.

As a recognized standard, XML allows for the definition, transmission, validation and interpretation of data between applications and organizations. Support for XML documents, such as IBM Workplace Forms built into IBM’s on demand operating environment, enables the exchange of information among applications, systems and people.

The use of electronic signatures in the e-form eliminates the need for soldiers to organize combat patrols to get documents signed. These convoys consisted of several Army personnel in a three-to-four vehicle convoy transporting a printed form to a fort operating base for signature in combat areas, such as Iraq. Similarly, palletes of paper forms were flown by air cargo ships through war-torn countries back to the United States for processing and storage.

The new process will eliminate the need for Army personnel to be exposed to enemy fire in transporting forms for signature and approval.

*“At the end of the day,  
it came down to what  
was the best solution for  
the soldiers in the field,  
and the Army’s clear  
choice was.....IBM.”*

Bruce Lyman,  
chief executive officer,  
Enterprise Information  
Management

Previous paper-based form processes were estimated, conservatively, to take 10 hours to complete each form. With one form being handled by about six personnel throughout the year, it is anticipated that Army personnel will save a total of 60 hours annually per form.

In total, the implementation of XML e-forms with electronic signature capabilities, is expected to save the Army millions of person hours across numerous departments.

The new e-forms program also is projected to yield the following benefits:

- Reduced development and system maintenance costs
- Reduction of system redundancies and common user errors
- Improved security of information and provision of auditable records
- Interoperability with existing infrastructures and system extensibility—the ability to add new features to an existing program without disturbing any existing code
- Regulatory compliance (Government Paperwork Elimination Act)

### How does it work?

Customers can work on their e-forms online or offline. A user-friendly IBM Workplace Form interface guides them easily through the form completion process. Form users can now save their work, then add to it, revise it or review it later at their convenience.

IBM WebSphere Portal will allow Army personnel to open multiple windows or portlets. Within a portlet, they can view items, such as an in-basket, a list of commonly used forms, or forms awaiting completion. They can access, use and share information or applications.

The Army now can add secure electronic signatures to forms, including a detailed approval audit trail. The signer's identity and certificate status is verified, and signatures are visibly invalidated on any document that has been modified. The new solution enables validation of a user's authorization throughout an entire enterprise workflow process.

### IBM middleware – underneath the covers

The new solution is based on IBM DB2® Content Manager, IBM WebSphere® Application Server, IBM WebSphere Portal, IBM DB2 WebSphere Information Integrator for Content and IBM DB2 Universal Database™, as well as DB2 Records Manager, IBM Tivoli® Access Storage Manager and IBM Tivoli Identity Monitoring Suite Manager.

“The selection of the IBM software suite was the best choice for the Army enterprise program,” said Bruce Lyman, chief executive officer of EIM. “The requirements were very specific on availability, technical capabilities and scalability to the size and global nature of the Army enterprise,” he said.

## Key Components of the U.S. Army solution

### Software

IBM Middleware Solution for Government E-Forms and Records Management

- IBM DB2 Content Manager (Version 8.3)
- IBM DB2 Records Manager (Version 4.1)
- IBM DB2 Universal Database (Version 8.2)
- IBM WebSphere Application Server (Version 5.1)
- IBM WebSphere Business Integration Server Foundation (Version 5.1)
- IBM WebSphere Information Integrator for Content (Version 8.3)
- IBM WebSphere MQ (Version 5.3)
- IBM WebSphere MQ Workflow (Version 3.5)
- IBM WebSphere Portal (Version 5.1)
- IBM Tivoli® Access Manager
- IBM Tivoli Identity Manager
- IBM Tivoli Storage Manager (Version 5.3)

### Hardware

- The software solution runs on a variety of IBM eServer® xSeries® and pSeries® using IBM TotalStorage® products for data storage.

### IBM Workplace Forms

- IBM Workplace Forms™ Designer
- IBM Workplace Forms Server
- IBM Workplace Forms Viewer Silanis
- ApprovelT Desktop
- ApprovelT XHTML Server

The solution needed to be robust and provide value. "At the end of the day, it came down to what was the best solution for the soldiers in the field, and the Army's clear choice was the integrated content management suite from IBM," Lyman said.

EIM participates in IBM PartnerWorld® Industry Networks, which offer a rich set of incremental industry-tailored resources to all PartnerWorld members who want to build their vertical market capabilities and attract potential customers in the markets they serve worldwide. Whether a company focuses on one or more industries – or serves small, medium or large companies – IBM has the technology and resources to help members more effectively meet their clients' needs.

EIM is an "optimized" member of the government network. "Optimized" means it has developed further specialization by optimizing its applications with IBM on-demand technologies, achieving success with its own on-demand solutions and other criteria.

Other networks are: automotive, banking, education and learning, electronics, energy and utilities, fabrication and assembly, financial markets, healthcare and life sciences, insurance, media and entertainment, retail, telecommunications, travel and transportation and wholesale.

Lyman said being an IBM Business Partner enhances the services his company provides. "With outstanding IBM resources available to us at the touch of a button, EIM can provide better quality and more responsive support to our customers and be more agile in a growing global marketplace."

#### **For more information**

Please contact your IBM sales representative or IBM Business Partner. Or, you can visit us at: **ibm.com/e-business**

For more information about ISV resources from IBM PartnerWorld®, visit: **ibm.com/partnerworld/industrynetworks**

To learn more about Enterprise Information Management: visit **www.eim-usa.com**



Copyright IBM Corporation 2006  
Route 100  
Somers, NY 10589  
U.S.A.

Produced in the  
United States of America  
11-06  
All Rights Reserved

International Business Machines Corporation, the IBM logo, DB2, DB2 Universal Database, eServer, PartnerWorld, pSeries, Tivoli, Total Storage, WebSphere, Workplace Forms and xSeries are trademarks or registered trademarks of IBM Corporation in the United States, other countries, or both.

Other company product or service names may be trademarks or service marks of others.

This case study is an example of how one customer and Business Partner uses IBM products. There is no guarantee of comparable results.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

WebSphere® software

## Wachovia improves business effectiveness with enterprise content integration solution.

### Overview

#### ■ Challenge

*Access and work with content stored in a disparate mix of content repositories following mergers*

#### ■ Why IBM?

*IBM offered a comprehensive, open solution that enabled the customer to leverage the widest variety of business information, from transactional data to unstructured content, as part of a common data model*

#### ■ Solution

*Enterprise Content Integration solution, a single, bidirectional interface to all disparate content repositories within various departments across the merged organization*

#### ■ Key Benefits

*\$2.3 million savings within 2 years for a 64% ROI; 50-fold increase in numbers of requests for content, indicating that customers are being served better; \$1 million savings for each additional business unit implementing WebSphere Information Integrator Content Edition solution; time to market for new information integration solution decreased with successive implementations*



*An IBM Enterprise Content Integration solution has made it possible for Wachovia to provide its employees with the content they need to facilitate lending and brokerage processes.*

Mergers and acquisitions have remained a key strategy for growth among banks in the United States, and certainly for Wachovia Corporation, (Wachovia) the strategy has worked. The Charlotte, North Carolina-based diversified financial services company ([www.wachovia.com](http://www.wachovia.com)) merged with First Union in 2001, and in the following year it acquired Prudential's retail brokerage business. Today, following another merger with South Trust Corporation, Wachovia is the fourth-largest financial services company in the United States.

*“With CAS, business executives are making their decisions based on what they need to do, not based on whether or not we can hook up a new system.”*

*– Kay Harris, Senior VP Information Technology, Manager of Workflow and Imaging Technologies, Wachovia Corporation*

## ***Achieving content integration cost-effectively and efficiently for financial applications***



*Wachovia's business units needed Web self-service applications that would enable them to work with content housed in repositories throughout the corporation.*

Wachovia has grown from 21,000 employees in 2000 to more than 95,000 today. The bank offers a comprehensive menu of services including Wealth and Capital Management, Corporate Investment Banking, Retail and Commercial Loans, and Retail Brokerage Operations.

For some of Wachovia's business units, however, the mergers posed challenges to the bank's ability to provide excellent customer service. Operations were siloed, and merged business units had their own CIOs, IT staff and content repositories. Millions of scanned documents, checks, brokerage statements, signature cards and legal documents were sequestered in isolated repositories. Large numbers of documents existed only as paper documents in rooms filled with filing cabinets. Employees could not access and view the content in real time, incorporate it into applications and present it to customers on demand. Wachovia's business units needed to quickly find a way to draw upon each other's content stores.

### **Pioneers in information integration**

The challenge varied by division. In Retail Loans, staff from the pre-merged Wachovia and First Union entities needed to access documents housed in disparate content repositories in order to issue new loans to customers. In Commercial Loans, the merged company had four different and geographically disconnected filing centers, each of which housed 50,000 to 60,000 documents. That meant there was no way for staff members to access the documents in order to service loans originating outside each individual filing center. Retail Brokerage employees needed to connect brokerage desktops to disconnected repositories to enable brokers and front-office personnel to access financial markets, client documentation and monthly account customer statements.

Beyond unifying their content sources, the business units needed easy-to-use, Web-based, self-service desktop applications that would enable employees to flexibly view and work with different content formats throughout the organization. The easier it was to access and leverage this content enterprise-wide, the better Wachovia would be able to live up to its commitment as a customer-focused organization.

***“Our Content Access Services layer opens up a whole new world for developers of our business-critical information integration solutions.”***

*—Randy Wilcox, Enterprise Content Management Architect,  
Wachovia Corporation*

### Choosing market-leading content integration software

Recognizing the difficulties, the Workflow and Imaging Technologies (WIT) group decided to explore an enterprise approach to content integration that could be implemented incrementally. After researching the market for software that would integrate the widest range of content formats, from transactional data to unstructured content, WIT chose IBM WebSphere Information Integrator Content Edition (then known as Venetica's VeniceBridge before it was acquired by IBM in October 2004). Using the enterprise content integration software, Wachovia created Content Access Services (CAS), a content integration platform that provides customer service, brokerage and workflow applications with a single point of access.

For Retail Loans, this means having a single desktop application for the loan-servicing workforce so staff from Wachovia and First Union can access each other's legal documents.

Commercial Loans uses CAS to obtain access to self-service desktop applications that enable staff to access legal documents from a unified image repository. And Retail Brokerage connects its brokerage desktops to two other repositories so retail brokers and front-office personnel have access to financial market, client documentation and monthly account customer statements. With these solutions, all three business units are more responsive to their employees and customers, building customer loyalty and enabling employees to focus on maximizing the value of each customer contact. Unrestricted by technology, the solution based on WebSphere Information Integrator Content Edition gives Wachovia business executives the ability to seamlessly integrate the content they need to enable powerful business applications and processes.

"With CAS, business executives are making their decisions based on what they need to do, not on whether or not we can hook up a new system," comments Kay Harris, senior vice president, information technology, manager of Workflow and Imaging Technologies, Wachovia Corporation.

---

### Key Components

---

#### Software

- IBM WebSphere® Information Integrator Content Edition

*"This project went 100 percent better than we expected. Looking ahead, we hope to move imaging up earlier in our business process, and IBM WebSphere Information Integrator Content Edition will play a key role in enabling that."*

*– Julia Condrey, Imaging Project Manager, Wachovia Commercial Loan Services*

### **On demand content integration enables successful merger**

In the end, WIT demonstrated to Wachovia's many business units that content integration can be accomplished cost effectively with an acceptable level of efficiency and performance for each implementation. Users do not need to know the origin of the information they request, and the loosely-coupled, flexible architecture does not commit the company to any vendor's software products. Says Randy Wilcox, enterprise content management architect, Wachovia, "Our Content Access Services layer opens up a whole new world for developers of our business-critical information integration solutions."

### **CAS delivers productivity gains, ROI, improved customer service**

Within a two-year period, CAS has saved Wachovia \$2.3 million, for an impressive 64 percent return on its \$1.4 million investment. Now that WIT has proved the worth of its CAS solution using IBM WebSphere Information Integrator Content Edition, other divisions within the bank have lined up to adopt the same solution. For each new implementation, Wachovia will save approximately \$1 million. In the Commercial Loan department, moreover, requests for electronic documents have averaged more than 140,000 per month, 50 times more than the number of requests for physical documents prior to the new solution.

This increased usage of the bank's legacy documents is translating into improved customer service. "Our number-one measurement is based on customer satisfaction," says Julia Condrey, imaging project manager, Wachovia Corporation. "Wachovia loan servicing staff are using CAS and we are not getting any complaints. Our group has been extremely satisfied. The project went 100 percent better than we expected. Looking ahead, we hope to move imaging up earlier in our business process, and IBM WebSphere Information Integrator Content Edition will play a key role in enabling that."

### **For more information**

Please contact your IBM sales representative or IBM Business Partner.

Information in this case study is derived from "Wachovia's CAS: Harnessing the Value of Multiple Content Repositories Across a Large Enterprise," by The Gilbane Report and Content Technology Works. To view the full case study, please visit: [www.gilbane.com/case\\_studies/wachovia\\_case\\_study.html](http://www.gilbane.com/case_studies/wachovia_case_study.html)

Visit us at:

**ibm.com**/software/data/integration

For more information on Wachovia:

[www.wachovia.com](http://www.wachovia.com)



© Copyright IBM Corporation 2005

IBM Corporation  
Software Group  
Route 100 Somers, NY 10589  
U.S.A.

Produced in the United States of America  
07-05  
All Rights Reserved

IBM, the IBM logos, the On Demand Business logo and WebSphere are trademarks of International Business Machines Corporation in the United States, other countries or both.

Other company, product or service names may be trademarks or service marks of others.

This case study is an example of how one customer uses IBM products. There is no guarantee of comparable results.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.







© Copyright IBM Corporation 2007

IBM Corporation  
Route 100 Somers, NY 10589  
U.S.A.

Produced in the United States of America  
January 2007  
All Rights Reserved

IBM, AIX, CICS, DB2, Lotus, Rational, the e-business logo, e-business on demand, the e-business on demand lockup, Tivoli, WebSphere, Workplace, Workplace Messaging, z/OS and zSeries, are trademarks of International Business Machines Corporation in the United States, other countries or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other Countries, or both.

Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

These customer stories are each based on information provided by the client and illustrate how one organization uses IBM products. Many factors may have contributed to the results and benefits described; IBM does not guarantee comparable results elsewhere.

IBM Content Management clients reaping benefits from information on demand solutions