

# LANSA Case Study

## Diversified turns to LANSA for fast access to archives

Diversified Information Technologies, headquartered in Pennsylvania, USA, provides document storage and record management services to over 450 corporate clients with over four million cubic feet of archival records spread over 18 locations. In only six weeks, Diversified replaced a slow Java-based Web site that took two years to develop, with a LANSA solution, that gave clients faster online access to documents.



**Tom Rosenkrans**, Senior Program Manager at Diversified, says, "Our customers access archive files that on average contain 10 million records. With our large file sizes, data access performance is the main selection criterion for any solution. With LANSA, you work with an easy 4GL, but underneath LANSA generates code that is optimal for the deployment platform and database."

### Accessing High Volume Files

"Our division deals with archiving the hard copy of documents. We image documents for our customers as well, but as long as the U.S. legislation requires that original hardcopies with signatures are kept, companies need to store and manage their paper documents," explains Rosenkrans.

"Most companies do not want to keep archival files as office space is too precious. Our customers clean out their filing cabinets on a regular basis and move the documents to boxes, which we pick up and take to one of our warehouses. Data entry staff then enter basic search criteria for the documents in our archival system."

"For example, we may receive a batch of boxes that contain insurance policies for January 1999. In addition to the date, the customer gives us a key to search on. The search key could be an invoice number, a policy number or any other item."

"Once the search keys are entered, the boxes of documents are sealed and stored in the warehouse. Customers can search our database to locate the document they are after and we send the particular box to them. We keep all archival files online. Just recently we retrieved some 1988 documents for a customer."

"A few years ago we developed a Web site with Java to give our customers online access to their archival files."

*"Customer satisfaction improved tremendously as response times came down."*

"Unfortunately, the site had performance problems. When searching through archival files of over 17 million records for our large customers, fast performance is essential. Even our smallest archival database has nearly four million records."

"When you have a few hundred thousand records you may not notice a difference between SQL and RPG-based file access, but when you deal with high volume database files like ours, the difference is very noticeable," says Rosenkrans.

### A Faster LANSA Solution

"At the time, we chose Java because it offered cross-platform portability," continues Rosenkrans. "Even though we love our iSeries, we don't want to be locked into this architecture. So we looked for a solution that could offer faster DB2/400 access, but would also allow us to deploy the solution on other platforms."

"I wandered around the Internet and found LANSA. I looked at several other alternatives as well, but I liked the concept that LANSA generates fast RPG-based data access when deployed on iSeries and fast C and Java access when deployed on Windows."



“LANSA offered to do a proof of concept for us. Within a few days, they showed us a Web-based inquiry using several access paths over a database of 17 million records.” “The performance was very fast and that was what sold us. We liked LANSA’s ease of use and Repository approach as well, but performance was the main criterion.”

“We prepared the Repository and brought in a LANSA consultant for 25 days. After 25 days, we had the application 90 percent done and at the same time, the consultant gave intensive on-the-job Web development training to two of our RPG developers. The project, including implementation, was finished on time and on budget.”

“During the project we got very good feedback from our heavy usage customers. Once we made them happy, we could be pretty sure that the other 98 percent were going to be happy with the solution as well.”

“On a scale from one to ten, with one being the fastest performance, I would rank LANSA performance as one and Java as eight. Customer satisfaction improved tremendously as response times came down,” continues Rosenkrans.

### *Attracting New Customers*

“We call the solution WebCIRM for Customer Information Record Management,” says Rosenkrans. “Customers can now search for their documents and very quickly locate the box they need and order its delivery. The archival system integrates with our warehouse management system and keeps a history of the location of each bar-coded box, so the order automatically creates a picking list in the relevant warehouse.”

“On average we have 30 to 50 people searching our files at any one time and we calculate that we have up to 2,000 searches a day. We used to get a lot of support calls when performance was slow. Now there are fewer calls and we enjoy reduced customer service costs.”

“Our customers have reduced their communication, support and training costs as well,” says Rosenkrans. “There will be further savings on both sides when we let our customers do their own data entry online, rather than having our data entry department key in data.”

A representative of the Corporate Records Management group of one of Diversified’s largest customers, says, “We rolled out the WebCIRM system to more than 1,000 users nationwide. WebCIRM was quick to set up, easy to implement and gives a very good response time over files of over 17 million records.”

“The interface is user friendly, offers online help text and

has significantly reduced training time. WebCIRM does not require any additional expense, installation or maintenance effort for connectivity software on the user’s desk. This makes the solution easy to support, which is particularly important in a large and distributed user environment like ours.”

*“When searching files of over 17 million records, fast performance is essential.”*

“Because of its low implementation costs our service has become attractive to a much wider audience. The WebCIRM has become a major marketing tool to entice new customers. Because LANSA is easy to use and quick to learn we had a smooth knowledge transfer from LANSA to our inhouse development team and we can now react very quickly to customer requests using our own development resources. This helps to continuously improve customer service while keeping maintenance costs down.”

“We had two people working on the Java-based solution for almost two years, but with LANSA and the help of a consultant we basically re-did that same development cycle in six weeks.”

“It worked out much better than our expectations. I didn’t think that we’d get as much done as we did, in so short a time. So, we are definitely pleased and are now planning to gradually convert all our inhouse development to LANSA.”

### *Integrating New Technologies*

“With LANSA we are ready to integrate new technologies,” says Rosenkrans. “For example, with LANSA it will be easy to blend the retrieval of imaged documents into our Web-based archival search and enquiry solution.”

“We are also looking at using Wireless technology in our warehouse. Most PDAs offer a browser interface and with LANSA we can easily provide this interface over our existing warehouse management system.”

“What we like best about LANSA is that you work with an easy 4GL and LANSA generates code that is optimized for the deployment platform you choose. You are not locked into any platform.”

“Our operations are currently supported by iSeries, but if we started a similar operation in another country and wanted that operation to run on NT, we don’t have to redevelop. We just take another deployment option,” concludes Rosenkrans.

### *Company and System Information*

- Diversified Information Technologies provides a wide range of Information Management Services, including Document Storage, Capture and Conversion, Claims Processing, Internet Storage & Retrieval, Mailroom Processing, Microfilm, Tape Management, Active/Inactive Business Management System, Database Mapping, Data Warehousing & Mining and Medical Transcription Services. Diversified provides document storage facilities and record management services to over 450 corporate clients, including many Fortune 100 and 500 companies within the financial, government, healthcare and insurance industries. Diversified has captured 600 million images and manages over 4 million cubic feet of archival records spread over 18 locations in the USA, with more than 600 employees.
- Diversified uses an IBM iSeries 820 with 180 gigabytes of storage for its operations and an iSeries 270 for Web access to its operational data. The front-end 270 also runs Lotus Notes.
- In March 2013, Diversified Information Technologies was acquired by EDM Group. For more information visit: [edmgroup.com](http://edmgroup.com)

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