

University of Miami gains flexibility with IBM information management solution.

Overview

■ **Challenge**

Support new Web applications by switching from outdated information management solution to modern relational database

■ **Why IBM?**

Research revealed that IBM DB2® Universal Database™ offered the lowest TCO, and positive past experience with DB2 on the mainframe established an excellent track record for IBM

■ **Solution**

IBM DB2 Universal Database information management platform with seamless, automated migration solution provided by IBM Business Partner ATERAS

■ **Key Benefits**

Lower licensing fees and TCO; ability to tap existing skills set at UM and recruit from current database administrator (DBA) market; agile and flexible infrastructure for developing more secure Web applications; improved user access to applications; streamlined business processes and improved productivity



With a modern relational database at the center of its Web architecture, accessing and using applications is easier and more efficient for students and administrators at the University of Miami.

Founded in 1925, the University of Miami (UM) has grown to become one of the largest private research universities in the southeastern United States. With more than 15,000 undergraduate and graduate students from around the world, the university has expanded from its main location in Coral Gables, Florida, to include a medical campus in downtown Miami and the School of Marine and Atmospheric Science on Virginia Key in Biscayne Bay. With more than 9,400 full- and part-time faculty and staff, UM is the largest private employer in Miami-Dade County.

“We’re more than satisfied that we have found a cost-effective solution to help us move the university forward and respond to the needs of our students and administrators for the foreseeable future. We have an amazing team including IBM and ATERAS to thank for that.”

*–Dr. M. Lewis Temares,
Vice President for Information
Technology and Dean of Engineering,
University of Miami*

Education

Key Components

Software

- IBM DB2 Universal Database for z/OS®
- IBM WebSphere® Application Server
- IBM WebSphere Commerce

Hardware

- IBM @server® zSeries®

IBM Business Partner

- ATERAS
-

Since the early 1980s, the University of Miami has run all of its mission-critical systems — including human resources, payroll, general ledger, sponsored research administration and all student systems — on a Computer Associates (CA) IDMS non-relational database management system. While adequate as a transactional database, the IDMS system prevented developers from easily and quickly developing Web applications due to the amount of programming involved, and had become a strategic roadblock. The 25-year old technology could not be used to respond to the demands of educators, administrators and students with user-friendly Web-based applications that would be easy to create and cost effective to maintain. Developing UM's primary Web applications, a student self-service portal and a financial application for administrators, occupied 40 IT employees over a five-year period because programming with the CA technology was so resource intensive.

“Cost and time to market were pressing concerns,” says Mike Zucker, information technology-applications development director, University of Miami. “But hiring DBAs and programmer analysts to work with an outdated technology was also a problem. We wanted to connect with a contemporary talent pool and be able to support the database without having to force database administrators to learn old-fashioned techniques.”

UM was more than ready to trade its green-screen, character-based business systems for an open standards environment with a robust, scalable relational database at the back end, Java™ technology-based business logic and Web front ends. However, the university had invested in a custom-made enterprise resource planning (ERP) system, and had no desire to change it or freeze out users during an extensive transition period. UM needed a Web-ready, high-performance database with a lower total cost of ownership (TCO) and a secure, fast method of transparently migrating to the new database.

When UM evaluated vendors to find an automated, seamless migration solution, it chose ATERAS (formerly Sophisticated Business Systems, Inc.), a Dallas, Texas-based IBM Business Partner offering end-to-end, fully automated conversion solutions that migrate older applications and databases. “Most other vendors would have rewritten our 10 million lines of code and frozen our applications for six months,” says Zucker. “ATERAS has a rules-based technology, DB-Shuttle™, which they helped us use to write a one-time migration paradigm which then does its job automatically.”

Positive experience and lower TCO sell DB2

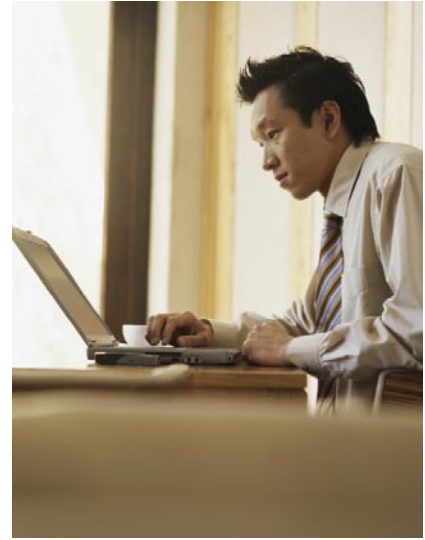
After working with a major industry analyst to research the database market, UM concluded that IBM DB2 Universal Database would meet all of its needs for Java technology compatibility and lower TCO. "All our studies led us to the conviction that DB2 Universal Database would offer us the lowest TCO," says Zucker.

Having worked with DB2 Universal Database on the IBM @server zSeries mainframe, Zucker's team already had experienced the stability and scalability of a DB2 data warehouse on the mainframe and wanted to recreate that environment for its information residing in IDMS. "The integration between the mainframe and DB2 is really tight, providing a very stable environment," says Zucker. "We looked across the range of possibilities and decided that DB2 was the most mature, best performing and most easily supported information management system for us." The fact that UM's existing DB2 technology skills could be tapped for a new DB2 database operation was also attractive.

ATERAS is using its patent-pending DB Shuttle tool to migrate UM's data to DB2 over a nine-month time frame, during which the data and applications on IDMS will continue to be available to users. The process is presently at the halfway point. When it is complete, the university expects to realize a significantly reduced TCO due to lower application development costs, better performance and an open standards-based environment that will enable it to raise productivity in the data center and streamline administrative and business processes for students and administrators alike.

Modern information management environment

Working with DB2 Universal Database, Version 8, has helped to expedite the migration process considerably. "The support for long field names in the latest version of DB2 has made a big difference in the transition process," says Dan Thomas, director of database administration, University of Miami. "If we had had to truncate our field names, we would have had to comb through thousands of data elements, making the whole process longer and more difficult."



By migrating to IBM DB2 Universal Database, the University of Miami can recruit talented database administrators with contemporary skills.

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—Mike Zucker, Information Technology-Applications Development Director, University of Miami

Already benefiting from faster time to market with DB2, UM anticipates further savings with the new database. "We're anticipating cost savings from the lower licensing fees and reduced maintenance costs of DB2. But our greatest success is in having a modern relational database platform at the center of our Web architecture."

Better performance, increased responsiveness and reduced risk

With its new Web environment based on DB2, UM can provide centralized access to its applications, increasing security by using common, centrally administered security protocols. The solution also extends the life of UM's proprietary ERP code, allowing UM to reap additional benefits from its investment in software development. With greater flexibility and agility in its IT infrastructure due to compliance with industry-standard code, UM can take advantage of new technology to enhance its environment in the future.

UM plans to take advantage of this flexibility to implement an integrated facility for Linux® on the mainframe to consolidate and run Web applications in place of its growing Microsoft® Windows® Web farm. UM has also targeted other IBM products in a new student tuition payments application. These include IBM WebSphere® Application Server, the premier Java 2 Enterprise Edition and Web services-based application server, and IBM WebSphere Commerce, a reliable, secure, scalable e-commerce platform.

Says Dr. M. Lewis Temares, vice president for information technology and dean of engineering, University of Miami, "We're more than satisfied that we have found a cost-effective solution to help us move the university forward and respond to the needs of our students and administrators for the foreseeable future. We have an amazing team including IBM and ATERAS to thank for that."

For more information

Please contact your IBM sales representative or IBM Business Partner. Visit us at: ibm.com/db2

For more information on the University of Miami, visit: www.miami.edu

For more information on ATERAS, visit: www.ateras.com



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