Case Study Library

Thomas College and SolutionsIQ

Waterville, Maine-based Thomas College doesn't just have a Web presence. Thanks to Microsoft Windows NT with Internet Information Server and Active Server Pages, as well as the CONNX ODBC driver from Microsoft Certified Solution Provider SolutionsIQ, the majority of the business college's information systems are accessible through the Web. The solution saves money, enables rapid application deployment, and facilitates information access for students, faculty, and administrators.

Colleges and universities are great repositories of information, but sometimes those repositories are not as accessible as they should be. Students at many schools cannot view their bills or access their course grades online. Administrators might have to turn to terminal emulation products to access a legacy system to update student billing records-which the administrator may have no way of sharing with a student except by printing the report and sending the hard copy via snail mail.

Thomas College, however, has none of these information roadblocks because it has built an intranet with which students, faculty, and administrators can use a Web browser to access and run more than 1,000 of the college's core business and academic applications-from registering for courses to managing student billing records. What makes this possible? A solution built on the Microsoft® Windows NT® Server network operating system with Internet Information Server and Active Server Pages (ASP), plus CONNX, an Open Database Connectivity (ODBC) driver from Microsoft Certified Solution Provider SolutionsIQ that links the Microsoft-based Web server to information and applications still residing on a legacy VAX system.

Enabling Access

Thomas College is a small private college that has been dedicated to teaching business for more than 100 years-and it remains the only college in Maine to have retained so focused a curriculum. The college enrolls approximately 1,200 students and relies on 100 faculty and staff members.

But officials at Thomas College realized that the information systems serving the students, faculty, and staff needed an update. Most of the college's applications were running on an aging VAX 4000 system that was accessible only through a text-based user interface and via reporting tools that few would describe as user friendly. While a great deal of information resided on this system, that information was simply not easily accessible to most users. And because the applications running on this minicomputer were all written in COBOL, it was no

Solution Overview

Organization Profile
Thomas College, based in central Maine, is a private business college with an enrollment of approximately 1,200.

Situation
Thomas College needed a more efficient way for students, faculty, and staff to access information and perform everyday administrative tasks.

Solution
Using CONNX, a simplified data access tool from Microsoft Certified Solution Provider SolutionsIQ, and the Microsoft Internet platform (including Windows NT with Internet Information Server and Active Server Page technology), Thomas College

small task for the college's Information Technology (IT) department to develop or modify applications to meet evolving needs.

What Thomas College needed was a new, user-friendly way both to create new applications and to enable users to access the information that they needed on a daily basis. And, in 1997, IT officials at the college found that way: with a Web-based solution from Microsoft and SolutionsIQ. Using Microsoft ASP technology, the Thomas College IT organization is able both to create and run new applications quickly and run ASP equivalents of each legacy COBOL application over the Web. The fact that these applications and information are accessible through a Web browser from anywhere (as long as the user has access privileges) has enabled universal access to information for users throughout the college.

In practical terms, this means that students can use the Web to register for classes or check on a grade at three o'clock in the morning. It means that a clerk in the accounting office can enter an accounts receivable transaction or credit a student's billing record with point-and-click ease through a browser window. It means that a user working with Microsoft Access or Microsoft Excel can create a database query in one of these familiar environments and save it in an ASP format-which the IT department can quickly load onto the Web server to make available to everyone.

Moving these critical systems to ASP and Internet Information Server has provided equally impressive quantifiable benefits. Course registration is now completed 25 percent faster than it used to be. Electronic admission applications are processed 50 percent faster. And the college has been able to offer 24x7 access to information without incurring any additional personnel costs. The college offices close at the same time they always have-but the Web stays open round the clock.

Making the Connection

While Microsoft's technologies power the Web site and foster the delivery of information, the CONNX ODBC driver from SolutionsIQ plays a pivotal role in the success of the deployment.

CONNX is a dynamic-link library that the Active Server Pages call to access data located in the VAX-based RMS database. CONNX processes the ODBC function calls, submits requests to the legacy system, and then returns the results to the ASP, which formats the information in standard hypertext markup language (HTML) and passes it back to the user's Web browser.

"CONNX is the glue that enabled us to integrate PCs and the Web with the existing VAX," says Chris Rhoda, director of information technology services at Thomas College. "It's a critical piece of our operation and it does everything we want it to." While the plan is to move all the COBOL-based applications to Web-based applications relying on ASP, that can't happen overnight. CONNX enables Thomas College to run both environments in parallel-so there is no time when critical applications are unavailable.

is enabling students, faculty, and staff to use the Web to run its core business and academic applications-from class registration to grade reporting to accounts payable and accounts receivable.

Microsoft Technologies Used
Microsoft Access
Microsoft Active Server Page technology
Microsoft Excel
Microsoft Exchange Server
Microsoft FrontPage® 98 Web site creation and management tool
Microsoft SQL Server™
Microsoft Windows NT Server with Internet Information Server
Microsoft Word

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Web-Enabled in Four Phases

Thomas College has nearly completed three of the four phases it has mapped for its transition to a Web-based information system infrastructure. The secure intranet environment that enables students and faculty to access legacy information around the clock is already in place. Seventy-five percent of the college's day-to-day administrative applications are now ASP-based Web applications-including applications for the Admissions, Financial Aid, Business, Registrar, Student Affairs, Alumni Services, Career Services, Continuing Education, and Development offices. Phase four, which is scheduled to begin in late 1999, will see the extension of a secure extranet enabling prospective students, high school counselors, and even prospective employers to gain access to information about college programs.

"As far as I know, we're unique among educational institutions in so far as we're running the majority of our college information systems in a Web-based environment," says Rhoda. "We're using Active Server Pages and other Microsoft technologies to do that. SolutionsIQ provides the ODBC driver that enables us to link up to our back-end database. We've skipped client/server computing altogether because we wanted to use very thin clients and enable access from on or off campus. A Web-based system was the best way to do that."

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Christopher Rhoda
Director of Information Technology Services
Thomas College

For More Information

About Microsoft

Call the Microsoft Sales Information Center at (800) 426-9400. In Canada, Call the Microsoft Canada Information Centre at (800) 563-9048. Outside the 50 United States and Canada, please contact your local Microsoft office.

For more information about Microsoft BackOffice®-based education solutions, visit the Microsoft education home page on the World Wide Web at http://www.microsoft.com/education/

About SolutionsIQ

SolutionsIQ develops and markets CONNX, a family of enterprise data access software tools for accessing legacy databases. CONNX allows organizations to fully utilize the information in disparate databases by presenting them as one ODBC-compliant data source for use in ad hoc reporting, application development, data warehousing, and migration.
1800 112th Ave. NE
Bellevue, WA 98004 USA
Tel.: (888) 88-CONNX (U.S. only) or (425) 519-6600
Fax: (425) 453-8871
E-mail: mailto:CONNX@SolutionsIQ.co
http://www.solutionsiq.com/.

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