

SERVING THE STUDENT COMMUNITY AT A FRACTION OF THE COST

Challenge

Virginia Community College System (VCCS) had five systems from each one of the 23 colleges that needed to be tied together. Each had its own ID and password security process, including PeopleSoft® Student Information System, BlackBoard® E-Learning Application, Student/Faculty E-Mail, Standard Library Access and Virtual Research Library.

Solution

The webMethods Enterprise Service Bus (ESB) Platform provided VCCS with complete system integration and legacy data conversion with Web services.

Benefits

The operational savings resulting from this solution were significant—\$1 million annually on operating costs, \$6 million in data conversion programs, and approximately \$375,000 in development time. Now higher enrollments mean more business—and more revenue—for VCCS.



The Virginia Community College System oversees a network of community colleges serving residents of Virginia. VCCS provides two-year degrees and various specialty training and certifications. The network comprises 23 colleges, 40 campuses, 340,000 students, 12,000 faculty members and runs on a \$450 million budget.

Get there faster.™

“The webMethods ESB Platform undoubtedly has saved us millions of dollars in programming time and administration costs over the long haul. Most importantly, though, it has helped us greatly improve the services we provide to students and faculty.”

Larry Hengehold | Vice Chancellor, Information Technology Services | Virginia Community College System

Integration issues

It's a classic story: a well-intentioned organization heads down the path of Enterprise Resource Planning (ERP), only to find integration issues lurking at every turn. Still, the Virginia Community College System (VCCS) was determined to integrate its 23 colleges and all their systems to make life easier for the 340,000 students depending on them. Soon after the ERP project began, it became clear that VCCS faced two very common, yet still daunting, challenges: integrating systems and converting legacy data. There were 23 different versions of the Student Information System, along with four other systems that needed to be tied together. And it all needed to be made available to students over the Internet, with just one ID and password.

VCCS faced an extraordinary legacy data conversion: 35 years of history equated to four million students and 75,000 faculty members. It all needed to be converted over to a PeopleSoft® application that sits on top of an Oracle® database. The project team needed to address the huge data conversion issue, nearly two terabytes of information, and at the same time, ensure all the converted data would be integrated among the five critical systems at VCCS.

One platform does it all

The VCCS technical infrastructure posed a challenge, not just in the sheer size of the database, but also in its inherent design. Data conversion would be tricky and lengthy. The project team wanted to avoid loading the legacy data from 23 different Student Information Systems directly into Oracle, which would then still require an interface with the overarching PeopleSoft® layer. The team used the adapter designed specifically for PeopleSoft products. This adapter allowed them to “feed the front door” with screen panels that exactly mimic PeopleSoft screens.

With this process, the PeopleSoft application was able to take the legacy data and process it just like any other transaction, storing the data in the Oracle database underneath. “If we had to load two terabytes of information into Oracle, then interface with PeopleSoft, we would have had to spend countless hours editing transactions and generating fields,” says Larry Hengehold, Vice Chancellor, Information Technology Services for VCCS.

All in all, the team had to design 80 different Web services to feed the front door with those screen panels. It took only five months for one VCCS staff member, trained on the webMethods suite, to create all 80 Web services.

But the project wasn't only about data conversion, it was about integrating five different systems. The webMethods ESB Platform easily helped VCCS tie together these critical student/faculty support systems.

Huge savings

Whether it is a new student filling out an enrollment package or an existing student taking an online course and using the research library, the new system can do it all securely and seamlessly over the Web. Larry Hengehold is so pleased with the results of the webMethods ESB Platform, he gladly produces statistics on the project. Eliminating the need for 23 different system security administrators (one for each college) saves VCCS nearly \$1 million annually. And also an estimated \$375,000 savings in development time. Add to that \$6 million saved by not having to write cumbersome data conversion programs and the fiscal results scream success!

VCCS has plans to use webMethods technology in other areas, from bringing in test scores to allowing students to reserve space on local area networks. “If we can make student life easier and

help our faculty teach more efficiently, we're going to do it,” says Hengehold. “We're trading the cost of the software, which is reusable, for the cost of programming time,” says Hengehold. “I think we've saved over \$6 million in programming time alone. It would've taken several people months to write data conversion programs.”

“From filling out an enrollment application to registering for classes and paying fees, students can do it all online now,” says Hengehold. “This means higher enrollments, more business, and more revenue for VCCS. It means we'll be achieving our mission assigned by the Commonwealth of Virginia.”

KEY COMPONENTS

webMethods ESB Platform

The webMethods ESB Platform combines proven application integration capabilities, high-speed messaging, support for B2B, legacy applications and event-driven technologies to create the most complete integration infrastructure available.

ABOUT SOFTWARE AG

Software AG is the world's largest independent provider of Business Infrastructure Software. Our 4,000 global customers achieve measurable business results by modernizing and automating their IT systems and rapidly building new systems and processes to meet growing business demands.

Our industry-leading product portfolio includes best-in-class solutions for managing data, enabling service oriented architecture, and improving business processes. By combining proven technology with industry expertise and best practices, our customers improve and differentiate their businesses – faster.

Software AG – Get There Faster

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