Migration Success Story

Arkansas Foundation for Medical Care

AFMC FINDS A PERFECT CURE

by Jane Harvey

From left to right: Jim Taylor (Programmer); Robert Reul (Programmer); Dai Tran (Programmer); Joe McDaniel (Manager of IS); Jeff Biggs (Director of IS).

Industry:
Healthcare
Platform Migration:
WangVS to Microsoft Windows
Language Conversion:
WANG VS COBOL to ACUCOBOL

The Patient

The Arkansas Foundation for Medical Care (AFMC) is a nonprofit corporation dedicated to the clinical evaluation and improvement of health care in Arkansas. Its community-based board of directors includes physicians and representatives from hospitals and other health care providers, business and consumers across the state. AFMC provides in-depth quality evaluation and improvement programs for Medicare, Medicaid and other payors; offers a variety of data management services to both the public and private sectors; and conducts extensive patient and public health education activities. AFMC's Health Care Quality Improvement Program, an evidence-based, data-driven structured approach to measurable clinical improvement, has achieved national recognition.

Healthy Start

AFMC was established in 1972 with the goal of focusing on the business of healthcare utilization review and quality improvement. A private, non-stock, not-for-profit corporation, AFMC has seen a steady growth with currently one hundred and fifty employees shared between its corporate office in Ft Smith, Arkansas and a regional office in Little Rock. For more than thirty years, by focusing on this core business and by communicating through public education, AFMC has worked extensively to achieve the goal of improving the health of Arkansans – hence AFMC's mission statement: "To promote excellence in healthcare through evaluation and education".

A Little Off Color...

Many years ago, AFMC installed a Wang VS 16000, which was utilized to run its business systems applications written in VS COBOL74. These applications were primarily 'review systems' and were created in-house from the ground up by AFMC staff. Further, the applications were highly customized and were designed to provide specific support to the many AFMC contracts, including the storing of all review input information, tracking reviews throughout the review process and producing approval and denial letters. These applications were further refined to include a reporting module to help manage the review process, produce ad-hoc reporting and perform accounting functions for payment. Over time, business growth and technological advancement caused AFMC to realize its systems were being encumbered by the proprietary limitations imposed by the Wang VS environment. Although Wang created some of the most powerful and reliable systems of its generation, it had been left behind in the technology world, from both a performance and development standpoint. In addition, support for the aging hardware had become difficult to arrange, with costs increasing as the number of Wang systems left operating in the US dwindled.

Finding a Cure

Jeff Biggs, Director of Information Systems at AFMC, was tasked with researching the options available to migrate from Wang, and bring AFMC up to date with current technology. After carefully reviewing the critical issues facing the company, Jeff knew he had to find a way to move his information systems to a new environment without a costly and time-consuming task of re-writing years of COBOL code production on a new system. In reviewing his options, the prospect seemed bleak... An 'off-the-shelf' package seemed out of the question, as AFMC's applications were simply too customized. AFMC could rewrite the entire set of applications in Visual Basic, a daunting task indeed, not to mention the enormous hidden costs of retraining staff in new skill sets or, worse,

replacing them altogether with new personnel. The latter would forsake years of business knowledge within his programming staff. Jeff also considered moving to Relational Database, but this would involve a massive effort especially in data preparation. Also there was the option of re-writing his applications in a PC-based COBOL. This seemed to make the most sense, but would still require a mammoth effort at a moment when time and budgets were demanding the most expedient and cost effective of solutions. With all these options came very high risks – in addition to the hidden costs mentioned earlier, there's the very real problem of production loss during the development phase and of course the frightening prospect of implementing unproven applications with the subsequent specter of instability hovering above them. At this point Jeff began to consider migration vendors and that brought him to Unicon Conversion Technologies.

A Proven Treatment

After reviewing multiple offerings by various companies, it became obvious that only one company provided a real solution. Many of the Wang conversion companies disappeared as Wang dissipated. Those that remained either used technology handed down through a succession of failed companies, lacking the internal knowledge to keep the tools at the forefront of the ever-advancing world of open systems, or they used proprietary middleware or 'emulation' to provide a solution – a fatal proposition as this would simply lock the customer into the conversion vendor making them forever dependent upon them, an extremely dangerous situation indeed. Unicon Conversion Technologies, based in Laguna Hills, California, has been providing Wang conversion services since 1985 and has consistently maintained a 100% success record in this field. All of the original development team still resides within the corporation today, ensuring the automated conversion tools are 'up-to-the-minute' in their ability to exploit the very latest offerings by the COBOL manufacturers and open systems providers. "Unicon was very helpful from the beginning..." Jeff stated, "...Unicon was able to convert a sample review system and let us see the result very quickly indeed". In addition, Unicon provided a bevy of references who could attest to Unicon's excellent results. Jeff continued, "We selected one who was just 6 months post conversion and asked if we could pay them a visit." A couple of phone calls and a plane ticket later, Jeff and his colleagues were on the customer site experiencing first-hand a live run in a production environment. The client's conversion had only taken a few months from project inception to live implementation... "This was an extremely helpful visit. We really liked the idea we could safely convert and be up and running in such a short amount of time". In addition, Unicon's ability to convert the Wang character screens to 'screen sections' in the new COBOL, meant that Unicon could provide conversion of the old character screens directly to GUI on windows. This provided a new feel and mouse functionality for the users, without proprietary inclusion, while leaving the screen format instantly recognizable. Unicon's pure solution, discussions with other customer accounts and the flexibility and deep understanding shown by Unicon's highly experienced staff reassured AFMC that Unicon was the right choice.

The Path to Recovery

Jeff made the decision to proceed with Unicon and to convert AFMC's existing systems applications to pure ACUCOBOL, running on a Dell PowerEdge 2650 Server with 3.2GHz Dual Xeon processors with 4GB RAM, 250GB RAID, Level 5 storage and running Windows 2003 server. The system would amply support 50 users in each of two locations. The conversion process was very easy indeed for AFMC. After performing the simple task of backing up their entire source code and shipping it to Unicon, AFMC created data testing sheets, providing simple instruction on how to run a cross section of programs. In addition, using *fully automated* data converters supplied by Unicon, AFMC was able to provide, with almost no extra effort, sample data for this purpose. Once the source was converted at Unicon, the converted programs were run against the data and test sheets. AFMC then flew to Unicon's site for one week to lend their acute knowledge of their applications to the basic testing phase. Just ten weeks after beginning the project, Unicon flew to AFMC's site to deliver and install the converted applications on AFMC's target platform.

A Clean Bill of Health

After the one-week training course highlighting the nuances of the converted source in the new operating environment compared to the old Wang code running in VS, AFMC was ready to perform user testing. This conversion went very quickly and smoothly indeed and within just a few more weeks, Jeff made the decision to go live. "I was extremely comfortable with the quality of the deliverable and, after extensive testing, knew I had the solution Unicon had promised". During a weekend, AFMC ran their data through Unicon's automated data converters, fed it into the new system and went live. The users came in on Monday morning and everything was running beautifully. Says Jeff "We couldn't be happier. We have no more Wang maintenance costs and our nightly jobs run so much faster." And the future? "As we learn all the new features and functionality available to us with the new ACUCOBOL, we will further develop the applications to take on even more of a GUI/Windows look and feel. Also, we plan to interface with the Web." For AFMC, there's no looking back. They take satisfaction in knowing they have used today's advanced technologies to preserve and further leverage the immense investment made over many years in their highly customized applications.

Unicon Conversion Technologies, Inc. can be contacted at: 23171 La Cadena, Laguna Hills CA 92653 USA
Tel: +1 949 454 1554 Fax: +1 949 454 1557 email: sales@uctnet.com Internet: www.uctnet.com