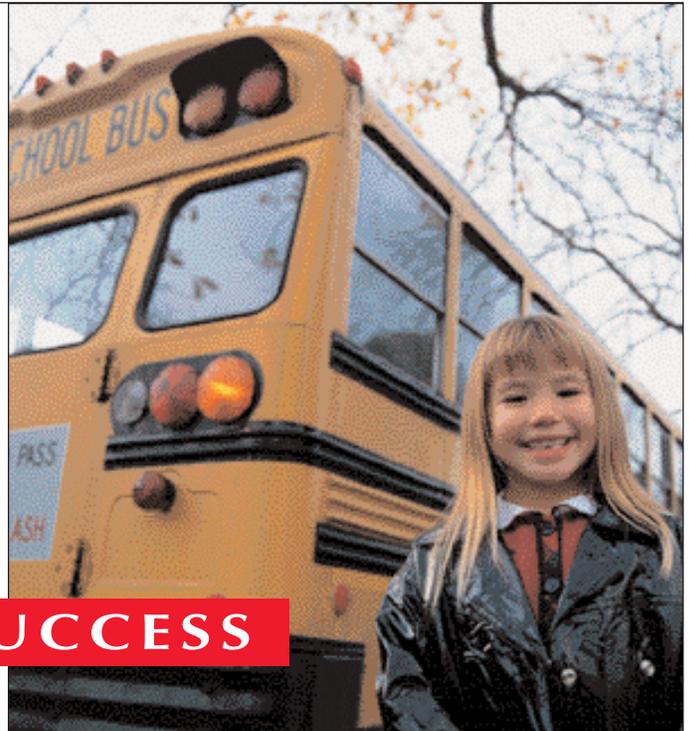


Acucorp™ and Unicon Make the Grade with Cincinnati Public Schools

Industry: Education
Current Environment: Windows NT
Application: Transportation Management
Acucorp Solutions: Migration, Programmer Productivity,
GUI Conversion
Previous Environment: DEC VAX/VMS
Previous COBOL: VAX COBOL



PARTNERS IN SUCCESS

Acucorp solutions helped Cincinnati Public Schools bring their transportation management software into the 21st Century.

By B.K. Davis

The Cincinnati Public School (CPS) District has used a custom COBOL program to track student transportation services for over thirteen years. When aging hardware forced them to rehost, Unicon Conversion Technologies, Inc., an Acucorp migration partner, helped CPS move their trusted program to open-systems COBOL and an upgraded network. At the same time, they made the program Y2K compliant. Then, for extra credit, they transformed one hundred and fifty character-based screens to a GUI interface... all in less than four months!

Doing the Homework

The Transportation Department of CPS ensures that approximately 40,000 students get to school every year. In late 1986, Don Austin, a Business Systems Analyst for the CPS Information Technology Services Department, wrote a COBOL program to track transportation vendors, busses (and other

vehicles), drivers, and "pupil incidents." The system also handled payments and invoicing. This program was coded in VAX COBOL and ran on a DEC VAX/VMS minicomputer using an ISAM database and character-based screens.

Although the program was well designed and met the needs of the school district perfectly, Austin had not envisioned in 1986 that it would still be in use at the turn of the century. However, years later, CPS's transportation services had not significantly changed and Austin's software was still a critical part of their administrative system. As Austin says, the program "wouldn't still be running to everyone's satisfaction if it wasn't a good system." The quality of the program notwithstanding, time and evolving computing environments conspired to require changes.

CPS's custom transportation program was too highly valued to consider switching to an off-the-shelf substitute, but it needed some maintenance, such as increasing the size of the student ID field and replacing the two-digit date fields that had seemed perfectly adequate over a decade before.

**"ACUCOBOL-GT
was a piece of cake
to work with!"**

**Don Austin,
Cincinnati Public
Schools**

Another issue was simply the age of the host system. Over the years, the operating system and the hardware were not kept up-to-date. Employees with expertise in VAX/VMS had moved

on. Most other software applications used at CPS ran on newer platforms like Windows NT and UNIX. Furthermore, Compaq Computer Corporation purchased Digital Equipment Corporation, the future of the VAX platform was in doubt.

Going to Class

Austin felt the best long-term solution was to migrate the existing program to a more modern platform, such as UNIX. He also favored moving to a more portable, open-systems COBOL. The main choices were Micro Focus COBOL and ACUCOBOL-GT. Austin considered Micro Focus COBOL until he visited Acucorp's headquarters in San Diego, California and converted several test programs to ACUCOBOL-GT. Austin says he preferred Acucorp for one reason, "I liked what I saw." He was most impressed with Acucorp's willingness to help him thoroughly evaluate the product prior to purchase.

Then in 1998, Unicon called CPS to see if they needed migration assistance. Austin was impressed by Unicon's 100% success record and customer references. The sample code Austin gave Unicon converted beautifully, and they agreed with Austin that ACUCOBOL-GT was the best COBOL for the job. In the face of mounting urgency to complete the conversion, CPS backed up the source code and shipped it to Unicon's offices in Southern California to be processed by their turnkey conversion system. The plan was to deploy the converted application on a UNIX server, leaving the existing character-based user interface intact.

Extra Credit

Austin never seriously considered adding a GUI interface to the application, not until he happened to mention to Unicon that CPS's UNIX server was much smaller than their Windows NT server. Unicon told him that it was just as easy to migrate to Windows as to UNIX, and on Windows, they could convert the existing character screens

to ACUCOBOL-GT graphical screens and achieve a more modern interface. After one demonstration, Austin said, "Do it!"

When the conversion was complete, Austin used the AcuBench integrated development system to make improvements to the printer selection functions and dress up the new GUI interface with CPS's logo and some 3-D effects. "I've never liked crowded screens." Austin says, "I like white space, with everything spread out and lined up in a logical manner." Austin also says, "ACUCOBOL-GT was a piece of cake to work with!"

Passing the Test

The transportation program is made up of around 100,000 lines of code, including 109 programs, 164 screens, and 141 copybooks. The whole conversion and migration process took a little over three months. With Austin's help, Unicon staff tested the integrity of the converted applications. When Austin and Unicon determined the software was ready for in-depth user testing, it was returned to CPS. James Harding of Unicon says, "The project was completed ahead of schedule and the resulting code was copied onto the target platform. [It] ran so cleanly, that within a week the system was put into production."

The conversion to ACUCOBOL-GT resulted in performance improvements ranging from ease of data entry to faster processing of batch jobs. When the indexed master files were in ISAM on the VAX system, it sometimes took up to seventeen hours to rebuild fragmented keys. With ACUCOBOL-GT's Vision file system, the process takes only two or three minutes. The first time Austin rebuilt the keys using the new system, it

went so quickly that he thought the process had aborted! This speed means that users can clean up the files daily instead of quarterly. Austin comments, "The system is much more efficient."

The Report Card

The converted transportation system has been in production now for over a year and users have given the updated program an A+! Austin adds, "To say everyone is pleased would be an understatement. The folks who actually use the re-hosted system are absolutely thrilled!" Austin has received comments from users including:

- "It's much quicker than the old system and some of the functions are more workable."
- "[Austin] and [Unicon] made the transition a pleasure."
- "It's easier to use and move around in. Now I can print only the sections of the document I need, which not only saves time but saves paper."

In collaboration with Unicon Conversion Technologies, Inc. and Acucorp, Cincinnati Public Schools retained and enhanced their investment in their customized legacy application while moving to a newer platform and open-systems COBOL. Austin says, "The migrated system running in Windows is easier to use, has a modern look, and will serve our purposes for many years to come."

For more information about Acucorp, Inc., and our products, please visit www.acucorp.com

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