



MARDON SUCCESS STORY

Rural Hospitals Demand Both GUI and Stable Platform

Mardon EDP (www.mardon2000.com), a long-time provider of software for the healthcare industry, has been facing accelerating challenges. Changing government requirements, highlighted by HIPAA (but wider than that), combined with changes within the industry, and rapidly evolving computing technology have placed serious stresses on the application software provider.

THE PROBLEM

Mardon's system for Electronic Health Records (EHR's) enjoys wide support in the small-to-medium-sized sector of healthcare, especially in rural hospitals. With 26 years of history embodied in its business logic, it has grown to over nine million lines of code. The value of that business logic was compromised in the minds of many of the systems' users by the fact that the user interface was still character-based, encompassing over 1100 screen layouts. But customers, prospects, and end users were increasingly expecting a graphical user interface (GUI). Cost estimates for a total redesign ranged upward of three million dollars and were expected to take up to 18 months.

In addition to character-based screens, character-based printing was becoming a problem. The huge amount of paper that was being generated in a small hospital results in significant costs for pre-printed forms, and the floor space for printed records storage is an unwelcome added expense. There had been difficulties in connecting character printers to servers, so having the ability to connect laser printers offered tantalizing possibilities, such as electronic printing of data, reducing actual paper output, as well as printing thousands of pages in just seconds instead of hours. The ability to use electronic forms overlays would eliminate the need to purchase any forms at all.

Finally, the remote locations of many of their customers, coupled frequently with the lack of local computer administration made server maintenance a challenge. At the same time, the increasing reliability of Internet connectivity presented the capability of relocating the servers in a more stable environment.

THE SOLUTION

SCO OpenServer at the Foundation

When considering alternatives, one thing that was NOT a consideration for Mardon and its customers was the server platform. Mardon's long history with SCO OpenServer has proven this platform to be the bedrock of Mardon's system offerings.

Mardon has now brought together a team of players to carry its winning systems forward for the next generation. By retaining its business rules logic and applying tools from its partners, it can present an improved product offering without disruption, while continuing to evolve to meet changing government and industry demands.

GUI from April Systems

For its graphical user interface, Mardon has worked with April Systems Design (www.aprilsystem.com) and its AniTa Windows Terminal Emulator. Constructed on a terminal emulation base, this product provides a way to apply a graphical look and feel to the underlying character-based application. Buttons, mouse support, check boxes, and other widgets present the user with the types of interface elements that they expect in modern applications.

Results have been outstanding, not one line of code had to be changed for any screen conversion, and there was no additional commitment of Mardon manpower to the project. April Systems Design also provided an acceptable conversion cost and delivery time frame of less than three months. All these factors made the project a win-win solution for both Mardon and their customers.



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"The use of SCO and AniTa in combination has given our firm the opportunity to provide a modern PC look and feel without overloading our company", says Don McKeny, CEO of Mardon. "We expect this gradual conversion of our entire screen system to benefit our customer base without having a long term cost effect to our firm."

Printing from Rasmussen Software

For its printing needs, Mardon has partnered with Rasmussen Software (www.anzio.com) to use its Print Wizard product, which does printout adjustment, print enhancement, bar coding, and even print elimination while dumping reports to PDF. In Mardon's architecture, the print jobs originate on the SCO server, flow through the AniTa system on Windows, and then are processed by Print Wizard. As a first step, Print Wizard auto-fits reports to the page, regardless of the type of printer the customer has selected.

For the hundreds of government and industry forms that must be processed, Print Wizard allows use of an electronic image or form that is combined at print time with the text from the server. This lets the user print on plain paper, resulting in the dramatic reduction in the cost of pre-printed forms.

Print Wizard is also able to produce PDFs from the Mardon output, with or without form overlays. PDFs can be emailed; and they can be archived and searched easily.

McKeney was impressed to hear how rapidly this solution had been put into action at their pilot site. "Within two months of installation, their accounts receivable office had gone totally paperless!" he exclaimed. "For a hospital, where 80% of their paperwork is in receivables, that is a huge benefit to the customer."

Server Backup from Digital Design

To assist with server administration issues, Mardon has established a relationship with Digital Design, Inc. (www.digitaldesigninc.com). DDI can provide co-located servers at its Nevada facility, with extensive power backup, system redundancy, and physical security. DDI's staff can handle the server maintenance and other administration. Access to the servers from the client site is over secure links with high bandwidth, supporting both Windows and UNIX for reliability, and uptime. Digital provided a global communication (ASP) data center where multiple software vendors from Sweden, Oregon, Arizona, Utah, Michigan, and Las Vegas were able to use Digital's telecommuting environment and consolidate all of the vendors projects in one location with out ever leaving their office. No long distance phone calls, no travel, hosting multiple computing environments, pooling global talent, saving time and money, providing instant professional results.

The team that Mardon assembled has resulted in a solution suite that provides its users with a robust combination of user interface, printing, and system administration solutions on top of highly evolved business logic. Because no system redesign was necessary, Mardon's developers were able to continue refining their code and adapting to ever-changing requirements. Customers are able to focus on providing health care, while reducing costs of maintenance, forms, storage, and training.

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