Laserfiche ECM Blogs

Marina Medical Boosts Fiscal Health and Goes Greener by Moving to HP/Laserfiche Paperless Billing Solution

Written by Laserfiche Staff

"The HP/Laserfiche paperless solution eliminates the costs associated with handling millions of paper documents. It transforms our business. We can stop buying all that paper and all those boxes to store it." – Lisa Busch, Senior Director, Information Systems, Marina Medical Billing Service, Inc.

High paper pressure clogs medical biller

Hospital emergency rooms (ERs) are extremely busy and generate a flood of paperwork – including medical charts, insurance information and demographic data (address, employer, etc.). Marina Medical Billing Service provides emergency room billing services for a number of hospitals and emergency room physicians. The California-based company needed a document-management system to quell the rising mounds of paper. "We were entering and filing and archiving too much cumbersome paper," explains Senior Director of Information Systems Lisa Busch, Marina Medical. "Some of the ERs we work with were already going paperless. That meant we were buying more printers and using more paper, toner and energy to print out the incoming electronic data. We were converting electronic records to paper! At the same time, we were growing; we needed room for people, not for paper." Based on their research of paperless solutions, Marina Medical determined that the Laserfiche document imaging and management system was a good fit for their requirements. "Our billing software company, CPU Medical Management Systems, had worked successfully with Laserfiche in the past," says Busch, "so we knew the Laserfiche system would work with our billing software. Marina signed a deal with Laserfiche for a 90-day pilot project, which was successful. Laserfiche reseller JPI Data Resource understands the health care business, and they made the pilot successful.

HP/Laserfiche solution passes the "stress test"

Before they committed to go paperless at all the hospitals they work with, Marina needed to "stress test" the Laserfiche solution to determine if it could still do the job three years down the road, when Marina expects to have more hospitals using it. Marina put together a test team of HP, Laserfiche, JPI and Integrated Solutions Group (ISG), an HP systems integrator. JPI and ISG strongly recommended HP hardware as the underlying infrastructure for the document imaging and management system, and

Marina had good experience with HP products. Says Busch, "We always liked HP's reputation for hardware reliability and service support." "Setting up and running the stress test turned out to be a huge project," says Dan Lundy of JPI. "HP Services did a great job of expediting the hardware and pulling it all together."

The trial simulated 60 million pages of records, load levels at double the projected peak, and 200 users logged on simultaneously performing continuous search requests. The team also tested redundancy and failover capability in case of a power failure or system outage. The HP/Laserfiche environment passed every assessment. Says Busch, "We suddenly pulled the plug on one HP server, and in less than five minutes it failed over to the other system – with nothing lost and no hiccups. We were very impressed with Laserfiche and with HP technologies and the support we got from HP, JPI and ISG."

Clean bill of health since going live

The test platform included the Laserfiche and VMware virtualization and failover software running on two HP ProLiant DL380 servers, with SQL database software running on a third DL380. An HP StorageWorks 1500 Modular Smart Array (MSA1500) provided storage. Based on performance in the stress test, Marina chose to go into production with the same software and HP hardware platform.

The MSA1500 provides economical shared storage and, with redundant controllers and switches, the high availability that Marina requires. The ProLiant DL380 G5 servers perform up to Marina's high expectations, says Busch: "We have had no hardware-related issues since our go-live date. One of the noticeable immediate benefits of the HP hardware platform is that the modular design of the hardware components, particularly the MSA1500, and the compact, all-inclusive rack assembly help us take advantage of our limited server room space." The Integrated Lights Out (iLO) management functionality of the DL380 servers enables remote management – without requiring a keyboard or monitor.

Increasing vitality by going paperless

The conversion to a paperless workplace must remain a very systematic process. While Marina's clients are ER physicians and medical practices, the processes and systems they work with are based on each hospital's own individual medical-record system.

With the HP/Laserfiche solution in place, Marina started going paperless one hospital at a time. "Electronic files from the hospitals are tricky to work with, because they are all different," explains Busch. "When we take a new hospital paperless, we first map their data into our formats and figure out how to modify their data and get it into Laserfiche."

When data comes in to Marina, it goes to the Laserfiche system, which captures the data, creates patient registration sheet and sends it to the CPU Medical billing system, which then generates patientbills. As the paperless system grows at Marina, it will handle an enormous amount of information.

"On an average, a hospital sees 3,000 ER patients per month," says Busch, "and generates six pages of documents per patient. When 100 hospitals go paperless, we will handle almost 2 million pages of

documents each month." Busch expects that it will take about 18 months to convert all of the hospitals they work with to paperless.

Building a healthy corporate lifestyle and boosting higher availability

Going paperless is also a major factor in helping Marina Medical Billing become a "greener", more energy-efficient company – reducing its consumption of natural resources while controlling costs. Eliminating the need to ship tons of paper documents to and from hospitals reduces both shipping costs and energy consumption. Enabling staff to work at home reduces energy used in commuting. More directly, eliminating printing of documents slashes the number of printers Marina needs, and cuts significantly the consumption of paper, toner and energy.

The automatic failover capability demonstrated so dramatically in the stress test is an important feature of the paperless system. In a paper world, if the power goes out people could still pull files and keep the process moving. In a digital world, Marina must be able to recover quickly from a power outage or other failure. The Laserfiche software runs on two HP ProLiant DL380 servers with VMware High Availability functionality. If a server fails for any reason, the system automatically fails over to the second server and reallocates resources.

To support their ability to recover quickly from any sort of data loss, Marina added an HP torageWorks Ultrium 960 tape drive, LTO-3 Ultrium data cartridges and HP StorageWorks Data Protector Express software for data backups and restores. "The data on the tapes is just as critical as the data on the hard drives," says Busch. "Using HP LTO-3 Ultrium tape media in conjunction with the StorageWorks Ultrium 960 tape drive promotes compatibility and reliability."

### Faster invoicing for clients, lower cost for Marina Medical

For their customers, the paperless system makes Marina more efficient and speeds up billing. As a result, revenue comes in sooner. In addition, all electronic document

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For Marina, the big payoff is eliminating the costs associated with handling and storing a huge amount of paper. Previously, Marina had 30,000 square feet of space at $26 per square foot. About 20 percent of the space was dedicated to storing paper, and that was enough space for only six months worth of paper. After six months, the staff archived the "old" paper offsite or in a less expensive part of the building. The paperless system reduces people costs as well as space costs. Some Marina employees spent all day swapping in new paper documents and taking out old ones. As hospitals go paperless, Marina takes people from phased out departments and retrains them for new work, which reduces hiring and training costs for new positions. The paperless, all-electronic system also lets people work off site, giving Marina greater staffing flexibility.

Going paperless also helps Marina grow its business. "Now we can grow without adding people," says Busch. "And we can operate worldwide. Geography and distance are not a problem because we no longer need to ship tons of paper documents."
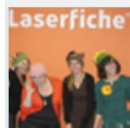
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