



Millstone Coffee

Business Challenge:

Develop a reliable, high performance, feature-rich mobile handheld application to enable Millstone Coffee drivers nationwide to service their customers more efficiently and transmit route transaction data more cost-effectively to company headquarters.

Solution:

SQL Anywhere Studio running on Palm OS-based Symbol 1700 handheld devices.

Results:

- 30% annual return on investment.
- Data capture, data updates and management superior to previous text based system.
- Synchronization of handheld devices slashed from 10 – 20 minutes to 2 minutes.
- Route drivers spend more time selling and servicing customers than struggling with old DOS-based application.
- SQL Anywhere/Symbol 1700 handheld system successfully supporting 450 drivers nationwide.

Industry:

Retail

System Configuration:

Ultralite and Mobilink deployment options of SQL Anywhere running on Palm OS.

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*Kirk Wolfe, Former
Millstone Coffee Software Engineer
(now President of Enterprise Mobility)*

When manufacturing and marketing giant, Procter & Gamble (P&G) acquired Millstone Coffee in 1995, the four year old premium whole-bean Arabica coffee company was a regional firm doing business in the Pacific Northwest. Millstone employed a direct delivery model in which its drivers (also called sales associates) delivered coffee to supermarkets where they stocked, cleaned and maintained the shelf displays and grinding equipment. To allow drivers to generate invoices and store credits on the spot, Millstone equipped them with DOS-based handheld devices that connected to company headquarters via dial-up modems.

In acquiring Millstone, P&G added another premium brand to its portfolio of products. At the same time, it also inherited a technology challenge, which it solved using SQL Anywhere Studio, from iAnywhere Solutions, a Sybase company.

P&G's most pressing challenge was to rewrite the code on Millstone's existing handheld devices to enable the information generated by drivers during their rounds to be entered into P&G's mainframe-based order, shipping and billing (OSB) system. Once that was done, Millstone's IT staff could turn its attention to larger issues regarding the limitations of its mobile application, particularly in view of P&G's plan to distribute the coffee nationally.

Key Requirement:

A Real SQL Database That Could Be Embedded in a Handheld Device

"We wanted a handheld system that would allow drivers to do more than simply issue invoices and credits," explains Dave Ziegler, IT Manager for Millstone Coffee. "We wanted to decrease the required connection time for the drivers to transmit their data to our OSB system and wanted a system that would allow us to embed a real SQL database so we could make and transmit individual record changes rather than having to send entire files. Finally, we needed something that would be more reliable than the devices Millstone had been using, since they had a very high failure rate."

These requirements led Millstone's IT department to explore a number of hardware and software options that would be a better fit with P&G's existing systems. The solution would also have to be scalable enough to support its vision of how the Millstone business would evolve. Its first decision was to replace the existing DOS-based handhelds with Symbol 1700 devices running the Palm OS.

"In addition to being a more reliable device," says Kirk Wolfe, a former Millstone Coffee IT employee, now President of Enterprise Mobility, "running on the Palm OS gave users the added contact management and scheduling capabilities that just come for free with a Palm device."

"Using the SQL Anywhere e-powered Symbol devices, Millstone's sales associates can look up thousands of records in a matter of seconds. SQL Anywhere's synchronization capability also enables Millstone to make changes to specific records – price, customer information or product information – and to send just those changes to the drivers' handhelds rather than entire files. That drastically shortens their connection time, which reduces costs."

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"SQL Anywhere clearly eliminates a lot of the database development, speeding up the development of your application. It also gives you a lot of control over what data is sent to the handheld and what data you pull from the handheld to manage centrally. It makes the hardware run fast so drivers can look up thousands of records in seconds. Our ROI on this project has been 30 percent on an annualized basis. If we had this to do all over again, we would make the same decision and choose SQL Anywhere Studio from iAnywhere Solutions. And I would certainly use it for future projects as well."

*Dave Ziegler,
IT Manager, Millstone Coffee*

SQL Anywhere Performance and Synchronization Capability Key to Selection

Next, Millstone turned its attention to the database that would reside on the Symbol devices. "One of the biggest features we wanted in any new mobile system was a real relational database that could be embedded into the Symbol devices and could synchronize with Millstone's mainframe OSB system," says Wolfe. "That, along with great performance, is what SQL Anywhere Studio from iAnywhere Solutions brought to the table. Using the SQL Anywhere-powered Symbol devices, Millstone's sales associates can look up thousands of records in a matter of seconds. SQL Anywhere's synchronization capability also enables Millstone to make changes to specific records like price, customer information or product information. Sending only those changes to the drivers' handhelds rather than entire files drastically shortens their connection time, which reduces costs. Where drivers' daily connection times used to be 10 to 20 minutes per handheld, using the new system the connection time has been slashed to about two minutes per handheld. Multiply that by the 450 handhelds in the field nationwide and that's a huge savings." The system is programmed so that when drivers log on at the end of the day to transmit their business records, Millstone's central server also updates their local SQL Anywhere database with any records that have changed, ensuring that they're always working with current information.

About SQL Anywhere Studio

SQL Anywhere Studio from iAnywhere Solutions is a comprehensive package that provides data management and enterprise synchronization to enable the rapid development and deployment of distributed e-Business solutions. Optimized for workgroups, laptops, handheld devices and intelligent appliances, SQL Anywhere extends the reach of a corporation's e-business to anywhere business transactions occur.

Reliability Frees Drivers to Focus on Sales and Service

The reliability of the new Symbol/SQL Anywhere handhelds has also produced dramatic benefits for Millstone. "Our annualized failure rate on the old DOS-based handhelds was about 20 percent per month. With the current handhelds, we're running less than five percent," says Ziegler. "Drivers no longer have to spend a lot of time troubleshooting the system. Instead, they can focus on selling to and servicing our customers, which is really what they need to be doing."

SQL Anywhere Enables Rapid Development

Perhaps the biggest benefit of using SQL Anywhere Studio was that it enabled Millstone's IT department to rapidly develop the new mobile application. The company evaluated other solutions including Oracle Lite, but found that SQL Anywhere facilitated rapid development whereas Oracle's tools were harder to use. From blank page to roll-out of the new system took about nine months, which included a lot of design work in addition to straight development work.

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Ziegler is not alone in his assessment. Kirk Wolfe started Enterprise Mobility to create a very similar mobile application for the dairy industry, also using SQL Anywhere.



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