Success Story

Getinge Case Study | Delphi XE7

embarcadero

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Introduction

Getinge Infection Control is one out of three business areas within Getinge AB, a publicly-listed, Swedish-based group of companies. The Getinge Infection Control business consists of two segments: Healthcare (infection control solutions) and Life Science (contamination prevention solutions). IT development for this division is based in Copenhagen, Denmark. Its flagship product is T-DOC, an ERP and stock control solution for sterile supply management, traceability and billing that is used in 1,200 hospitals in 44 countries and available in 26 languages.

Challenge

As a team responsible for software development, the IT solutions group for Getinge Infection Control is constantly faced with keeping pace with change, despite a limited number of staff.

Demand from the healthcare sector for logistics and resource processing capabilities has grown exponentially since the company introduced its first product to market in 1996, says Chief Architect, Lars Sondergaard. "Hospitals are like a big factory that run 24/7 and use thousands of instruments. Real-time data logging of equipment and supplies is an increasingly critical need."

When the division began there were only three programmers. Today the core team in Copenhagen has grown to 13 developers and a quality assurance team of seven.

As technology evolves, the pace of development has had to accelerate. With four million lines of source code and growing, Sondergaard says it is imperative that its development efforts are streamlined and efficient. That is why it has been working with Embarcadero Technologies' Delphi software development platform, throughout their expansion.

Solution

Before joining Getinge, Sondergaard had already worked extensively with Delphi. "In fact I had moved over to it when Delphi 1 was a prototype," he says.

Over his 18 years with Getinge Infection Control, Sondergaard has continued to work with Delphi. "Now we're up to Delphi XE7 to develop connected applications for multiple platforms including Windows, OS X, Android and iOS," he says.

Sondergaard notes that at the time, it was one of the only tools that offered easy database access. That capability has stood the test of time. "Even though other solutions come to market, there is always an argument for keeping Delphi because it is not tied to a specific database platform and is usable on many platforms."

The key selling points for Sondergaard are the fact that Delphi uses the same code base and offers backward compatibility. "We have never had to rewrite the T-DOC system even when something new comes along, which makes it easier and faster for our staff. That's one of the good things about our choosing Delphi."

He says prototyping has always been much simpler with Delphi. "It provided an easy way to deal with Windows, which was a big plus when we were starting. We still have access to everything today. If we want to go low and nitty gritty, or do something simple like create a screen – it's all easier."

GETINGE

Delphi XE7

ORGANIZATION

Getinge Group Infection Control Division

APPLICATIONS

Medical software for infection control and contamination prevention

TOOLS USED

Delphi XE7

CHALLENGES

Speed application time to market with existing staff numbers

Keep pace with exponential growth of international clientele

Expand functionality to additional devices/platforms

RESULTS

Real-time data handling capabilities in a full production, mission-critical system

Team is able to develop diverse solutions with a limited number of developers and in a shorter timeframe

Same source code capabilities frees up resources to focus on new products

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Results

The speed and efficiency of working with Delphi was evident when the team began working on mobile integration.

"We started looking at iOS and Android two years ago," Sondergaard says. "We were able to release the first app 14 months ago. A big part of our success was Delphi. We were able to do some pretty advanced things that were not really possible in the same timeframe with other tools. If you factor out a couple of months of setup time, the actual development time was only four months using two developers."

Another advantage for Sondergaard is that applications made with Delphi today can still run on Windows 2000 as well as Windows 8. "That means we've been able to spend time making new stuff without having to fix older stuff that continues to work. With other tools, if you use a newer version, it won't work for older Windows versions, which means having to redo things. I would say we spend less than half the time other companies do because we don't have to update old functions. We just add modules and features to the system we have."

Speed of time to market is increasingly important as the number of devices used in healthcare environments grows. "Users have a whole palette of devices they can use with our systems – from mobile phones and barcode scanners to tablets and web-based interfaces."

Even with 4 million lines of source code to contend with, it doesn't take long to compile in Delphi, he adds. "We don't have to sit around and wait to finish what we're working on."

With more development projects on the horizon, Sondergaard says the focus is now on transitioning from a three-tier class system to a service-oriented architecture with REST-based services and clients. "The great thing for us is, Delphi has added support for REST and has some pretty good third party partners and tools available." Over 60 vendors provide third party plugins, tools, and components for the RAD Studio XE7 family – including Delphi XE7.

The team is currently working on one of the biggest installations in the company's history, involving eight hospitals and a user base of 6,000 – all running concurrently on one system. Sondergaard is not concerned: "With Delphi we've been able to grow our ERP system from a small to a very, very big system using the same tool all the way. Nothing out there has ever compelled us to change to any other tool."

Getinge is also working on RFID (radio frequency identification) and RTLS (real-time location systems) functionality, he adds. ""Every time we work on something new for our T-DOC ERP solution, we know it won't take very long to do with Delphi."

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