

# QUANTEL

Accelerates Innovation with Spring

## QUANTEL



## SPRINGSOURCE RESULTS

Spring delivers the following business results to Quantel:

- Reduced Development Cycle Time by 33%
- Rapid Prototype Delivery
- Greater Customer Confidence
- Database Consistency
- More Comprehensive Testing
- More Reliable Debugging
- Application Performance Enhancements

## TESTIMONIAL

*"Spring makes our development, testing and research cycle much quicker. Using Spring has shortened out project development time by about a third and gives us a significantly more reliable and easier to manage system than we had previously."*

*"Using Spring, I have already found about 20% of the bugs that I would not have found at this stage using our old process."*

*"Spring gives us a view into the state of the system that we could never have before... That kind of information is absolutely priceless."*

## Quantel

Quantel, based in Newbury, UK, is a world leader in content creation systems for broadcasting. Quantel's product range includes systems for multi-resolution finishing, color correction, stereoscopic 3D post and integrated news and sports production, delivering creative, productive and profitable workflows for customers. The applications developed by Quantel are a key to the company's success, and rapid innovation is required to maintain a leadership position in the global market.

### Challenge

One of Quantel's major innovation projects is an application designed to connect very large disparate networks. A smaller version of this application was developed in Java, but the Quantel development team soon realized this platform would not support the type of application they envisioned, and would not allow them to easily add more functionality.

"We had trouble managing transactions properly, and we did not have roll back capabilities, and consequently the database would be inconsistent," recalls David Newcomb, Senior Software Engineer at Quantel. "The organizing, copying and transferring of video from one server to another server, all the transaction-based communications and messaging, we found extremely difficult on the previous platform."

"Previously, we didn't have any unit testing," Newcomb adds. "We couldn't take a little piece of the application out and test it. The only way was to test everything at once. Every time the testing department would find a bug, we would fix it and then they had to test everything again, which was time consuming and extremely expensive in terms of testing resources. Not being able to 'see' into each unit meant that some bugs were inevitably finding their way onto the customer site - not the best stage of the development process to detect them."

### Solution

Quantel turned to Spring, the de facto standard platform to build, run and manage enterprise Java applications, and built a new application to interface with the previous system which enabled them to add new functionality faster. Now, Quantel is replacing the old application piece by piece with new components built in Spring, for a smoother transition that will not impact the customer experience.

“Spring has enabled us to reorganize our development process with best practices such as unit testing,” Newcomb explains. “We are forced to do programming in a different way, and in the end we get a loosely coupled, easy-to-manage infrastructure that allows us to add new functionality when needed.”

## Benefits

### SPRING DELIVERS THE FOLLOWING BUSINESS RESULTS TO QUANTEL:

#### Reduced Development Cycle Time

“Spring saves us loads of time,” Newcomb confirms. “Spring makes our development, testing and research cycle much quicker. Using Spring has shortened out project development time by about a third and gives us a significantly more reliable and easier to manage system than we had previously.”

Because Spring provides infrastructure components, such as database connections, Quantel’s development team no longer has to write, test, debug and maintain this code, which significantly reduces the development process. “The SpringSource website has tons of resources, documentation, case studies, help and people we can talk to,” Newcomb adds. “The enormous wealth of information from SpringSource allows us to leapfrog over a lot of the legwork required to start a project.”

#### Rapid Prototype Delivery

Quantel faced a tight time frame to deliver the latest application. A prototype had to be ready in time for a customer’s site visit. “We were able to build a prototype in a month using Spring,” Newcomb says. “There is no way we would have been able to build the prototype in the timeframe we had without using Spring.”

#### Greater Customer Confidence

“Delivering the prototype on time meant the customer has a far higher confidence level that we are capable of fulfilling the requirements,” Newcomb adds. “Without Spring, we would’ve had to show them a presentation instead of a real demonstration. This does not instill confidence in the customer. If you can show them a working prototype, then that is worth more than a hundred marketing presentations.”

#### Database Consistency

With Spring, Quantel now has built-in transaction management capabilities which ensure consistency in the database. Furthermore, the Quantel development team saves time because they do not have to write or maintain this infrastructure component.

#### More Comprehensive Testing

Spring provides Quantel with unit testing capabilities, which has dramatically changed the way the company tests applications. Now,

the Quantel development team can release a single feature to the testing department, and debug the component without having to test the entire application every time. According to Newcomb, this enables Quantel to test every component of the application more thoroughly and get feedback back faster, streamlining the development and testing processes.

#### More Reliable Debugging

“The amount of bugs that we have been able to spot early with Spring – instead of finding them only when the application reaches the customer’s site – would be another way of measuring how much time and effort we are saving by using Spring,” Newcomb explains. “Using Spring, I have already found about 20% of the bugs that I would not have found at this stage using our old process. Some of those bugs were in edge cases and would have gone unnoticed all the way through our old process, but they were discovered early because of the tools Spring has provided.”

#### Database Consistency

The Quantel development team always wanted to build a way to collect metrics into the application, but never had the time until they switched to Spring. Using JMX in Spring, Quantel gains visibility into application performance – drilling down to the causes of performance issues. “Spring gives us a view into the state of the system that we could never have before,” says Newcomb. “This is going to help us in the production environment by collecting statistics on the nature and usage of our system in the real world. Using JMX in Spring gives us a far greater idea of the strains a particular workflow puts on the system, so we can improve application performance in the future. That kind of information is absolutely priceless.”

## About SpringSource

SpringSource, a division of VMware, Inc., (NYSE: VMW) and the leader in Java application infrastructure and management, provides a complete suite of software products that accelerate the entire build, run, manage enterprise Java application lifecycle. SpringSource employs the open source leaders who created and drive innovation for Spring, the de facto standard programming model for enterprise Java applications. SpringSource also employs the Java and Web thought leaders within the Apache Tomcat, Apache HTTP Server, Hyperic, Groovy and Grails open source communities. Nearly half of the Global 2000, including many world’s leading retail, financial services, manufacturing, healthcare, technology and public sector clients are SpringSource customers. For more information visit: [www.springsource.com](http://www.springsource.com).



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