

# eHarmony

IMPROVES PRODUCTIVITY AND REDUCES CYCLE TIMES WITH SPRING INTEGRATION

## EHARMONY



## RESULTS

Spring Integration delivers the following business results to eHarmony:

- Accelerated Development – development time cut by 75%
- Competitive Edge & Creative Innovation
- Better Application Quality
- More Functionality & Greater Scalability
- Improved Application Monitoring
- Reduced Cost

## TESTIMONIAL

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## eHarmony

Santa Monica, Calif.-based eHarmony, Inc. was founded in 2000 and is a pioneer in using relationship science to match singles seeking long-term relationships. Its services, available in the United States, Canada, Australia, United Kingdom and Brazil, present users with compatible matches based on key dimensions of personality that are scientifically proven to predict highly successful long-term relationships.

### Challenge

eHarmony previously used enterprise service bus (ESB) technology for the backbone of its web services. The company explored many commercial and open-source ESBs but always ran into configuration issues.

“It was the configuration problems that really bothered us,” recalls Jeffrey Gortatowsky, Software Architect at eHarmony. “You expect to be debugging or looking for issues in your business logic, but you don’t expect to spend 50% of your development time or effort trying to figure out why changing a certain parameter causes some sort of weird error to come up.”

“ESBs were inappropriate for our agile organization,” he continues. “We couldn’t have engineers spending hours or days of time configuring an application to get it to run properly.”

When an ESB is running in one of the company’s data centers, the engineers do everything they can to avoid touching it. Any custom work deviating from the ESB’s standard recipes could result in errors, ultimately extending the development cycle and time to market on an application.

### Solution

eHarmony switched from ESBs to Spring Integration to communicate with external services and support internal services. Spring Integration offered a lightweight extension of the Spring programming model that supports Enterprise Integration Patterns. All of eHarmony’s web applications, and all of the enterprise applications supporting those web applications, are now based on Spring, and every backend service eHarmony builds uses Spring Integration as the backbone framework.

For example, Spring Integration is used to drive the eHarmony News Feed, which keeps users up-to-date on what is happening with their accounts. All eHarmony integration with third-party social media providers use Spring Integration. Jazzed.com, a search-based website operated by eHarmony, was also built from the ground up using Spring and Spring Integration.

"Spring Integration is a good foundation to build our logical service components on because of the Spring-friendly architecture, testability and reliability," says Gortatowsky. "It automatically gives us loose coupling and encapsulation due to its message passing paradigm and that gets our engineers off to a clean start by keeping all the different concerns separated. It's easy to use and has a lightweight architecture, which is why we're also migrating all of our legacy web services to it."

## Benefits

### SPRING INTEGRATION DELIVERS THE FOLLOWING BUSINESS RESULTS TO EHARMONY:

#### Accelerated Development

"Our engineers can stand up the backbone of a new service in Spring Integration in a day, or even hours," Gortatowsky explains. "In the past, it could take as much as four times longer, depending on the amount of debugging they would have to do. Spring Integration means less development effort, less debugging, better architecture. Time-to-market and cycle times are greatly reduced."

eHarmony gains productivity in two ways: developers can wire up the backbone of a service faster, and they spend less time chasing down errors.

#### Competitive Edge

"Spring Integration lets us get the job done so we can be competitive," notes Gortatowsky. "We spend more time focusing on the business logic and less time focusing on how to get the pieces to communicate. We're focusing on our business objectives, and our customers, and that enables us to be more competitive."

#### Creative Innovation

Engineers that use Spring Integration get very creative with their Spring Integration chains and they come up with innovative and even elegant solutions, says Gortatowsky. They see new ways of processing the business logic, and they take opportunities that would not have been available previously due to the extra time and effort that would have been needed.

#### Better Application Quality

Spring Integration allows convenient and comprehensive testing of services for eHarmony. Components are isolated, which allows the engineers to write better tests, and business logic can be exercised at multiple endpoints. Ultimately, better testing results in more reliable, high-performance applications.

#### More Functionality

"Some of our functionality would have been very difficult to develop on a monolithic platform," Gortatowsky relates. "It just would have been too slow. It would cost me a lot of engineering time reinventing the wheel, and debugging the wheel."

"Our ability to make our site more responsive and more interactive depends on our ability to create lightweight, horizontally scalable components very quickly," he continues. "Scaling out the monolithic ESB to support new features for our users was very involved, and it shouldn't be. With Spring Integration, scaling out to support more users or add more features is just a matter of standing up another instance and assigning it a new port. You couldn't ask for much more than that."

#### Greater Scalability

Spring Integration allows the eHarmony team to continuously add or integrate with new emerging technologies, such as AMQP. This emerging messaging standard, Gortatowsky points out, is already supported by Spring Integration, which makes it immediately available to eHarmony engineers.

#### Improved Application Monitoring

Using Spring Integration, eHarmony can more easily build monitoring right into the application, augmenting both real-time operations support and extensive reporting for all levels of decision-making.

#### Reduced Cost

"It is less costly to develop an application with Spring Integration, compared to before, when the ESBs required on-site custom development," Gortatowsky concludes. "Those are hundreds of thousands of dollars of contracts. One of our major pushes is to not use commercial ESBs anymore, simply because it is not cost-effective. Spring and Spring integration are very cost-effective compared to a commercial support contract, not to mention that we were not getting the productivity results that we expect."

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## About SpringSource

SpringSource, a division of VMware, Inc., builds Java infrastructure software which eliminates the complexity of enterprise Java. SpringSource created Spring, the de facto standard platform to build, run and manage enterprise Java applications. SpringSource also employs the leading committers for Apache Tomcat and is the leading Tomcat support provider. 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 please visit [www.springsource.com](http://www.springsource.com).



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