



CASE STUDY: Creating Web solutions for Health Payers

ATG Retirement

Migrating complex web portals from ATG to an open-source platform



Challenge

Our client has made a strategic decision to move the code base of its web portals away from the proprietary ATG framework and to other solutions. After careful deliberation, the selected target architecture was one using the open-source solution based on Spring and Hibernate/JPA.

The migration was planned in two phases. While the focus of the Phase 1 was on the data layer and on upgrading key technology components that were reaching end-of-life, the focus of the Phase 2 was on removing the rest of the ATG framework including the migration of the front-end code base.

With the effort encompassing two years of very intensive work, this transition brought many challenges. Not only those originating from the sheer size of the effort and time constraints imposed by discontinuation of support for the technology components, but also those related to synchronizing all project activities with the regular maintenance and other projects going in parallel.

With its knowledge of the system and broad experience gained during the last 10 years, Pamet was uniquely positioned to respond to those challenges.

Our Solution

At the beginning of each of two phases we have conducted detailed analysis of the existing code and clearly defined the approach and objectives for the development. We have mitigated the risks by identifying possible problems early on and designing solution patterns for those problems so that development was executed smoothly later on.

In the first project phase we have upgraded JDK 1.4 to JDK 6, WAS 6.0 to WAS 6.1 and ATG 2006.3 to 9.1, and then re-wrote the Data Layer to no longer require ATG framework, and to use Spring and Hibernate/JPA instead.

In the second project phase we have replaced remaining ATG elements with appropriate alternatives (Spring MVC, Spring IoC, Spring Security, Quartz Scheduler, etc.). In addition, we have performed the code cleanup and separation of layers, and reorganized the portals so that each of them has an independent WAR file with common elements packaged into a separate Java project.

- ATG
- Spring
- Hibernate/JPA
- Oracle

Benefits to the Client

- \$100K in annual licensing costs for proprietary ATG platform have been eliminated after the web portals are migrated to open source solution.
- All of the key technological components were upgraded with the biggest impact having a switch to IBM WebSphere 7, which is saving \$50K/year in legacy support costs, and using IBM HTTP Server instead of SunOne, which is bringing efficiencies of the newer web server technology.
- The migration produced significant development and quality improvements:
 - The new platform lays the foundation for delivering new capabilities that realize the client's enterprise strategy.
 - The re-factored code is more readable and maintainable.
 - Moving the code to Subversion (retiring PVCS) is allowing developers to easily work in different branches and share code with other developers making collaborative development easier
 - Using Mingle instead of Merant Tracker is providing a single source of truth for all requirements and making Dev/QA and Build more efficient.