OFBiz Case Study – United States Air Force

Companies need to be able to quickly deploy applications to meet changing business needs. Integral Business Solutions (Integral) has found that the Open For Business (OFBiz) framework allows us to develop enterprise, web-based business automation solutions quickly going from prototype to production in 6 months.

Integral has been working on the OFBiz project since 2003. We found this project while attempting to assemble a toolkit of open source projects that would assist us in developing web-based business automation solutions. As it turns out, OFBiz is that toolkit and much more.

Integral started using OFBiz to develop a web-based Document Management System and has subsequently used it to deploy a number of automation solutions to the United States Air Force. This case study focuses on one of our recently deployed applications that went from prototype to production in six months. The primary enabler in deploying the application so quickly was OFBiz.

Application Overview

The Air Force approached Integral with a request to improve their contracting process. In its current form, the existing paper-based process was time consuming, tedious and required the same information to be input multiple times. The first phase of the new solution sought to collect all necessary information once and produce a single portable document that could be routed via email.

Integral chose a wizard-based approach to collect the necessary data and then integrated an open source PDF tool to produce the final document. Using the new widget technology in OFBiz, Integral was able to provide a clean, consistent and intuitive web interface in short order. This became the foundation upon which the remainder of the UI was built.

OFBiz provided a number of components out of the box that significantly reduced the effort required to build this enterprise web application. Integral utilized the entity engine and a number of pre-defined entities to manage persistence. The service oriented architecture of OFBiz allowed us to utilize features of the existing party manager and content manager instead of writing our own code to perform these functions. Overall, using OFBiz as the platform for this solution easily cut our development costs by 50-75 percent.

Phase 2

Integral is extending the contracting application to provide even more capabilities. Phase two includes (among other things) integration with an enterprise directory and automatic routing using a workflow. OFBiz provides an integrated workflow engine out of the box and Integral is working with the OFBiz community to enable directory integration. Using OFBiz gives us the opportunity to put technology components where they belong. For example, enterprise directory integration is best placed in the core platform, not in the application. It is a

common requirement that others in the community will utilize. As such, our client will benefit from having the community maintain and enhance this component.

Conclusion

OFBiz is a robust platform suitable for building enterprise web applications. Utilizing OFBiz has enabled us to rapidly create valuable solutions at a fraction of the cost. Integral will continue utilizing OFBiz to provide cost-effective, flexible and secure solutions for our clients.

More about OFBiz

OFBiz is a java-based framework that conforms to various open standards and a number of best-practices and patterns. It implements a componentized, service-oriented architecture and also does an excellent job separating concerns.

Developing anything but the simplest web application requires a number of supporting components. Making these components reusable at the technology level is good, but making them reusable at the functional level is even better. In its layered approach, OFBiz provides both. At the technology level, OFBiz contains a persistence layer, termed the Entity Engine, a workflow engine, a rule and constraint engine, a service engine and a content/knowledge engine. At the functional level, there are components for product, party, order, shipping, security, accounting, human resources, content and work effort.

In addition to the numerous components provided by OFBiz, it is also based on a number of emerging enterprise software best practices. The service-oriented architecture dramatically increases interoperability with other applications and allows for greater reuse of business logic within the application. The separation of concerns increases development productivity by allowing individual team members to focus on a layer or concern and not interfere with other team members. It also ensures clear definition of interfaces between the layers or concerns, which results in a cleaner overall design.

To learn more about OFBiz, visit www.ofbiz.org. To learn more about how Integral can help you leverage OFBiz to improve your business processes in a secure and flexible way, visit www.go-integral.com.

About Integral Business Solutions

Integral Business Solutions has been helping organizations cut costs and expand capabilities by evaluating and effectively deploying free and open source software solutions since 2000. Our focus on open source technologies allows us to implement highly robust solutions while significantly reducing infrastructure costs for our clients.

About the Author

Chris Chesney is the Chief Systems Architect at Integral Business Solutions. He defines the strategic technical direction of the company as well as identifies technology platforms to employ for client solutions. He designs client solutions from an architectural perspective and works with the development team to produce lower level design artifacts and mentors the team during implementation. Chris is an active member of the Open For Business community. His current focus is architecting solutions for clients as well as laying the groundwork for the new secure application development practice.

Prior to Integral, Chris served in a variety of consulting and non-consulting roles. He has a strong background in relational databases, LDAP, Java and web applications, in the Legal, Publishing, Agriculture, Finance, eCommerce, Manufacturing, Marketing and Government verticals.