



Two Case Studies in Mobile Ajax

ICEfaces is one of the leading open source Ajax frameworks for Java EE, and is based on the JSF standard, so is generally well positioned to deliver Ajax capabilities into any Enterprise Java development initiative. The ICEfaces technology utilizes a server-centric approach, which minimizes the client footprint with regard to amount of JavaScript required in the application implementation. This server-centric/lightweight-client approach has tangible benefits for resource constrained devices in the mobile space, as has been illustrated with recent development of mobile applications based on ICEfaces.

This session will present 2 case studies from actual mobile Ajax application development efforts, including:

1. A commercial yard management and dock scheduling application for the warehouse industry. The target mobile deployment for the application is the Symbol CE device running Mobile Opera. The application is a solid example of an enterprise application with desktop and mobile elements, and highlights the value of Ajax Push in the mobile space.
2. A taxi dispatching system, an internal ICESoft project exploring issues related to the development of collaborative, multi-role, mobile applications. This application is targeted at hand-held devices running both Mobile Opera and Safari. Of particular interest is the examination of cross-platform development issues.

For each of these case studies, we will present the following.

1. An actual demonstration of the application.
2. Mobile-specific considerations in the application design.
3. Mobile-specific development issues encountered.
4. Mobile-specific requirements related to future development.

There are a number of discussion topics related to these initiatives that are well aligned with the goals of the workshop, including but not limited to:

1. Examination of the benefits of Ajax for the mobile user experience. Of particular interest are techniques that maximize the interactivity of the application, but minimize the need for direct hands-on interaction with the application.
2. Evolution of UI design best practices for mobile devices. Ajax techniques have promoted new and complex web controls for the desktop space that are proving to be ineffective in small real

estate displays using alternate input devices. Of particular interest is the establishment of an effective set of UI controls for mobile applications.

3. Examination of application duality, where similar application features must be realized in both desktop and mobile deployments. Of particular interest are techniques for minimizing additional development required, through reuse of application infrastructure, and establishment of common development practices and tools for both desktop and mobile Ajax applications.
4. The role of web standards in mobile and desktop Ajax. There are some fundamental issues shared across Ajax and mobile Ajax that should be addressed in the standards and in browser implementations to the benefit of both domains.
5. The role of Java and Java-based standards in the Mobile Enterprise space. Of particular interest is the use of JSF to achieve application duality, and the reuse of existing Java development tools for mobile application development. Other enterprise-related issues such as security are also relevant.

ICESoft, ICESoft's customers, and members of the ICEfaces community are actively engaged in mobile Ajax development today. We can bring real-world experience to the workshop, and are well versed in all the major topics related to the workshop's goals. ICESoft will bring strong representation of Java EE approaches, and server-centric techniques to Ajax and mobile Ajax. We are also members of the JSF 2.0 expert group, so can convey mobile-related issues into the JSF specification process. ICESoft is an active member of the OpenAjax Alliance, has participated in the vast majority of Ajax-related industry events, and has fostered the rapid growth of the ICEfaces community, which now exceeds 20,000 registered members. ICESoft will be a solid contributor to the workshop, and is prepared to engage in follow-on work identified at the workshop.