

R&D Project: Extending web-experiences to the desktop

Introductory outline

Today we have reached the point where web applications can be independently of the browser and can be used as a regular desktop application. Because of the fact that these applications are in principle still web applications, with all possibilities it offers, these kind of crossover platforms have the possibility to combine the best of the web with the best of the desktop life.

This assignment lies in the field of "Rich Internet Applications" (RIA's) namely extending the online experience to the desktop.

Within the current series of web applications developed today, the user is experiencing more possibilities and functionalities as ever before which means higher demands are on the way for the graphical user interface supporting this 'Richer' interaction between user and application. One of the building blocks to reach this higher level of interaction between users and applications was AJAX. JavaScript and XML ensure we currently have the same opportunities for the graphical interface of a Web application as those of a desktop application.

RIA's are currently too dependent on the browser to be able to be used as a full desktop application and thus misses the added value. They are locked up in the browser, due to a number of security restrictions to what the application can provide to the user. The browser has a responsibility towards the user for his or her protection against unwanted items on the Internet. This means that the applications running within a browser, are bound to these safety restrictions. There is no standard for web applications to access the hard disk and they can not directly approach peripherals.

Also the mental model of starting a desktop application for many users doesn't match that of launching a web application.

Many leading software companies are currently working on getting these drawbacks to address. It is seeking to bring a bridge between desktop and web or in other words between online and offline.

Assignment

An international company, located in Belgium, is currently delivering innovative web applications to its customers. This range of web applications needs to be transformed into one web-desktop crossover platform.

The assignment is split into 2 parts:

Research (75%):

- a) Perform research on the currently available technologies:
 - 1) for bridging the gap between offline and online applications
 - 2) for extending web applications with desktop functionalities
- b) After the technological research a blueprint needs to be developed in order to transform the existing applications into one desktop crossover platform.

Development (25%):

Transformation of the blueprint into a working prototype of the web-desktop crossover platform.

Technologies:

PHP 5, XML, Javascript, java, HTML, Flash, ...