

**Concerns about TFWeb standard as applied to FAST**  
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The content integration standards in the NMCI Task Force Web development guide require that the FAST application be developed as a web-based application to be viewed through an instance of Internet Explorer (as opposed to a native Windows application). While Windows and web applications have the same capabilities in terms of low-level functionality, developing FAST as a web application raises concerns about the seamlessness of the user interface and about decreased developer control over the program.

A web-based application depends on the browser in which it is run to display its interface and handle input from the user. Such an application must therefore make use only of those controls and capabilities which are supported by the browser. Many interface features which are available as a matter of course in Windows applications must be either licensed from third-party developers or created from scratch in order to be used in a web application, and some may not be available at all. A web application must also contend with differences between browsers, and so must confine itself to using those interface features which work identically in all major browser versions. Some common Windows interface features that would be difficult to duplicate in a web-based application include hierarchical menus, meaningful progress indicators, and multiple on-screen windows which open and close dynamically as required by the application without interrupting the user's workflow.

Since a web-based application is viewed through a standard browser, some control over the user's experience is necessarily transferred from the application to the browser – the results of navigating between web pages using the browser's Back and Forward buttons, for instance, are not under the application developer's control in previous versions of ASP. This means that it may be possible for users of the final FAST product to create unintended consequences by making use of browser features which are not applicable to the FAST application.

These issues are reflected in the web-based OMMS-NG system known as EOptimized, which is currently in the testing phase of its development cycle. The interface has proven to be cumbersome, relying as it does on extensive use of drop-down boxes to approximate the functionality of a Windows user interface. It is also possible for users of this program to lose their work by using the Back button on their web browser.