Abstract

Widgets are simple, self-contained applications, typically with a single purpose. For years, they've existed on desktop computers to provide information in a user-friendly manner, like offering weather reports and newsfeeds but now that's old news. Widgets are rapidly moving to mobile phones, and business people are salivating at every opportunity to develop these mobile applications either as a new business venture or to increase value of their products. However, current situation demonstrates that fast rising demand of mobile widgets is causing the widget market to become fragmented. Thus, vendors are providing widgets which are not interoperable across platforms; resulting in duplication of work, increased time and cost of development to make them run everywhere. To alleviate the situation, several standardizing bodies are working towards write-once-run-everywhere widgets. This paper drills down to different standardization approaches, and shows how widgets can be made interoperable across mobile platforms using W3C standards. An important contribution is also brought to the subject by introducing a subject-role based access control mechanism, which makes the interoperable widgets more secure, thereby improving user confidence along with user experience.
Developing Cross Platform Secured Mobile Widgets using Subject-Role based Access Control Mechanism


Index Terms

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