

Open-Source Technologies in Web-Based GIS & Mapping

Abstract

This project is aimed to provide a scientific and thorough analysis of alternative options to building spatial websites through the use of open-source technologies. In comparison to costly software licenses, restrictions on use, interoperability, extensibility, ease of use, training resources and performance, open-source technologies have been proven in recent years to meet and in some cases surpass the abilities of proprietary software to produce effective and robust web-based spatial applications. The goal of this project is to analyze the industry-leading software tools and packages to provide a comprehensive cost-benefit analysis and gain a better understanding of the available alternatives to building spatial websites. This study proves that an open source web-based GIS configuration provides a viable alternative to using proprietary software in terms of cost, ease of use, performance and conformance to open standards.