Flash Mapping Applications Utilizing Open Source Web Services: Two Examples
Friday 15 Sep 2006 at 09:30 (00h30')

Two examples of web maps that use PostgreSQL-PostGIS-Geoserver as the backend.

While the open source community has developed many powerful server-side tools for distributing geographic data and maps on the web, many client interfaces are often lacking, which can sour a user's experience and interfere with the presentation of the data. In some cases the client interfaces offer too little functionality to allow exploration of the data; in other cases there is so much functionality that the user is overwhelmed. Other concerns relate to the adoption of certain technologies. Will a user take the time to find and install the SVG plug-in? Is JavaScript enabled? Does the user have Java on their machine?

Adobe Flash is one of the technologies a designer can choose to deliver geographic data and maps. Through the Flash scripting language, a high level of interactivity can be combined with attractive graphics to provide a rich user experience. Flash can communicate with open source web map services via XML and display the requested geographic data in both raster (WMS) and vector (WFS) formats. The Flash player plug-in is on 97% of internet-enabled computers worldwide.

We have used Flash for many web mapping tools; here we present two examples that use PostGIS and Geoserver, both of which are open source, as the backend. The Pennsylvania Cancer Atlas displays choropleth maps, cumulative frequency plots, and tables showing the rates of various cancers for the counties of Pennsylvania. The maps, plots, and tables are all dynamically linked. The Soil Extent Mapping tool shows the acreages and geographic extent of over 22,000 soil series in the United States, and allows searches by series name and soil taxonomy.

Primary authors: Mr. CRAWFORD, Stephen (Center For Environmental Informatics, The Pennsylvania State University)

Co-authors:
Presenter: Mr. CRAWFORD, Stephen (Center For Environmental Informatics, The Pennsylvania State University)

Session classification: Session 13 Development

Track classification: --not yet classified--

Type: Technical Conference