Contribution ID: 123

QGIS WMS Server - QGIS goes Web

Thursday 14 Sep 2006 at 09:45 (00h30')

This abstract wants to introduce an extended WMS server based on the QGIS libraries. QGIS is a user-friendly desktop GIS, which supports various vector, raster, and database formats. The new QGIS WMS server executable is a CGI application that uses the QGIS functions without opening any GUI. It not only tries to implement the OGC WMS and SLD standards - so that it will work with any generic WMS client - but it implements also new features.

One of these new features is the usage of SLD for the configuration/administration of layers and styles. An ?admin.sld? file, having XML-based syntax, is used for the server configuration. The standard SLD elements are extended with new tags which describe the data sources and their type.

QGIS WMS is also trying to implement a basic user authorization by accepting optionally two parameters (user and password) over an encrypted connection (HTTPS). Based on the user authorization and by providing the possibility of uploading/removing layers and styles, the software administration costs and deployment efforts will also be reduced.

Alongside the standard HTTP ?GET? and ?POST? bindings, also a SOAP binding is envisioned. The SOAP binding along with the service description in WSDL will support automatic client generation. Additionally, this approach will allow the clients to send their data (in GML) as part of the request message. As cartographic enhancements of the WMS/SLD standards, new symbolization possibilities like diagrams for thematic web maps are introduced.

Beside the presentation of these new features, the talk will illustrate - from a technical point of view - the process of transforming an existing desktop GIS like QGIS into a functional WMS server.

Primary authors: Dr. HUGENTOBLER, Marco (ETH Zuerich); IOSIFESCU-ENESCU, Ionut (ETH Zuerich); Prof. HURNI, Lorenz (ETH Zuerich)

Co-authors:

Presenter: Dr. HUGENTOBLER, Marco (ETH Zuerich); IOSIFESCU-ENESCU, Ionut (ETH Zuerich)

Session classification: Session~4: Development

Track classification : OGC

Type : Conference