RIVIapperWIVS

A Web Map Service providing SVG maps with a built-in client

Introduction

RIMapperWMS is a map server that adheres to the Web Map Service (WMS) specifications of the Open Geospatial Consortium (OGC). It can deliver maps in SVG with a built—in graphical user interface.

Functionality

RIMapperWMS serves interactive web maps from a spatial database back-end. Compared to existing WMS implementations it stands out firstly because it serves its maps in the Scalable Vector Graphics (SVG) format. SVG is a vendor-neutral open standard web format that allows the system to offer highquality vector cartography, specially suitable for the Web and mobile devices such as PDA's and smartphones. Secondly, RIMapperWMS can produce SVG output with a built-in Graphical User Interface, allowing the data to be disseminated to any SVG-capable application, without the need for a separate WMS client.

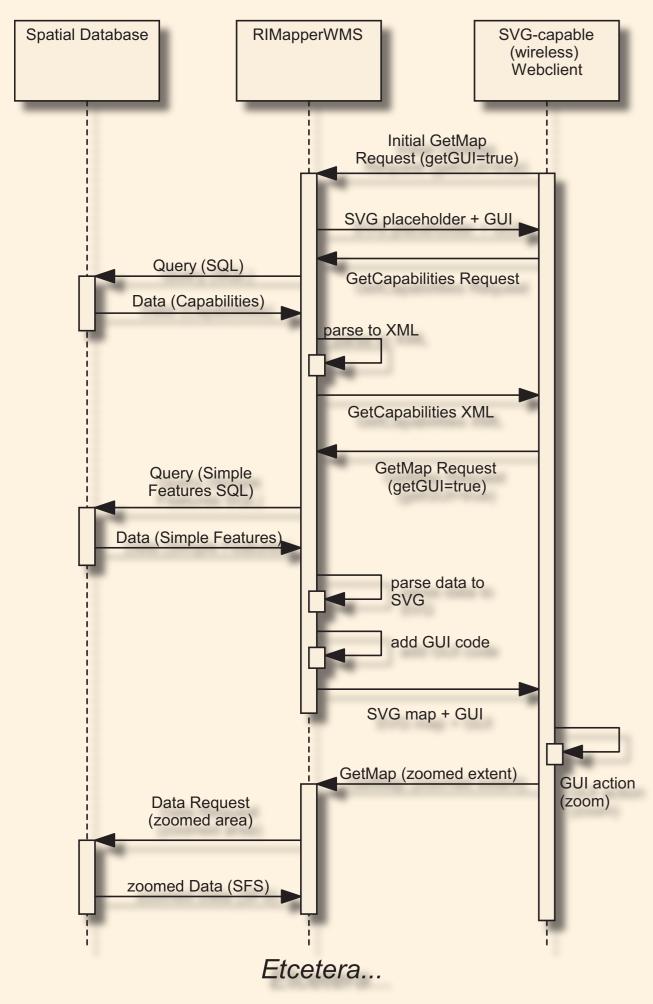


Figure 1: UML Sequence Diagram of requesting an SVG map with built—in client (getGUI = true)

SFS compliant RIMapperWMS: SERVLETS & CLASSES

WMSGetMap, WMSGetCapabilities, MakeSVG, MakeGUI, DBConn, etc...

palm

Technical Setup

to be mapped, stored according to the OGC other layers from services without a GUI, 'Simple Features for SQL' specification.

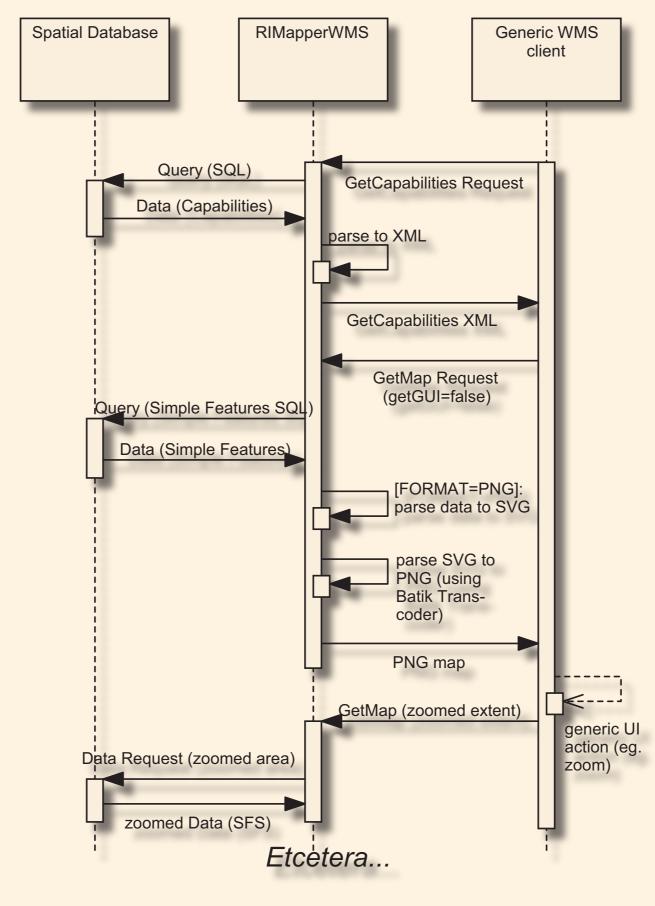


Figure 2: UML Sequence Diagram of requesting a PNG map using 'standard-mode' (getGUI = false)

Addition of the GUI to the WMS output RIMapperWMS is a set of Java servlets and is realised by adding an extra parameter classes that can be deployed in any J2EE (getGUI=true, see figure 1) to the WMS compatible servlet container (eg. Apache request. Such 'vendor-specific capabilities' Tomcat). The webapplication is configured are well defined in the OGC specification. using the database back-end. This database However, having a built-in GUI in one of the also includes the spatial and attribute data layers of a 'cascading' client combined with would break interoperability. In that case, RIMapperWMS falls back on its 'standard mode' (figure 2) delivering non-SVG output (eg. PNG, JPEG or GIF) without a GUI.

Status & Outlook

A first public bèta of RIMapperWMS is available on the website kartoweb.itc.nl/ RIMapper/. This version supports the GetMap and GetCapabilities requests and it can deliver SVG and PNG output. The only backend database supported at this moment is PostGIS/PostgreSQL.

Future versions will also support the GetFeatureInfo and GetLegendGraphic requests, and we also plan to implement using other databases (MySQL at first). RIMapperWMS is an Open Source project and everyone is invited to experiment with the software and contribute to its further development...

Information:

Barend Köbben

International Institute for Geo-information Sciences and Earth Observation PO Box 6, 7500AA Enschede kobben@itc.nl http://kartoweb.itc.nl/RIMapper/

