

# RIMapperWMS

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

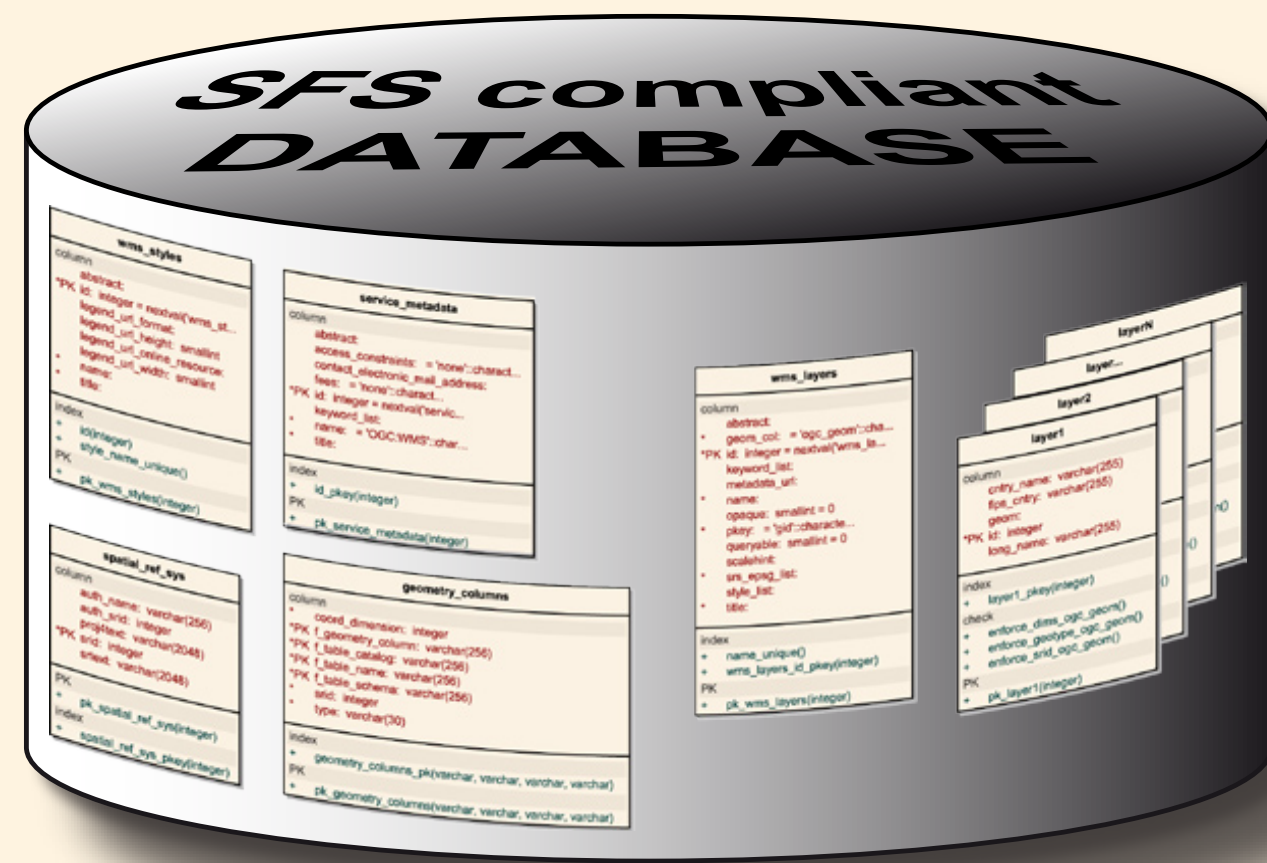


## Introduction

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 high-quality 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.



RIMapperWMS: SERVLETS & CLASSES  
 WMSGetMap, WMSGetCapabilities,  
 MakeSVG, MakeGUI, DBConn, etc...



## Technical Setup

RIMapperWMS is a set of Java servlets and classes that can be deployed in any J2EE compatible servlet container (eg. Apache Tomcat). The webapplication is configured using the database back-end. This database also includes the spatial and attribute data to be mapped, stored according to the OGC 'Simple Features for SQL' specification.

Addition of the GUI to the WMS output is realised by adding an extra parameter (`getGUI=true`, see figure 1) to the WMS request. Such 'vendor-specific capabilities' are well defined in the OGC specification. However, having a built-in GUI in one of the layers of a 'cascading' client combined with other layers from services *without* a GUI, 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.

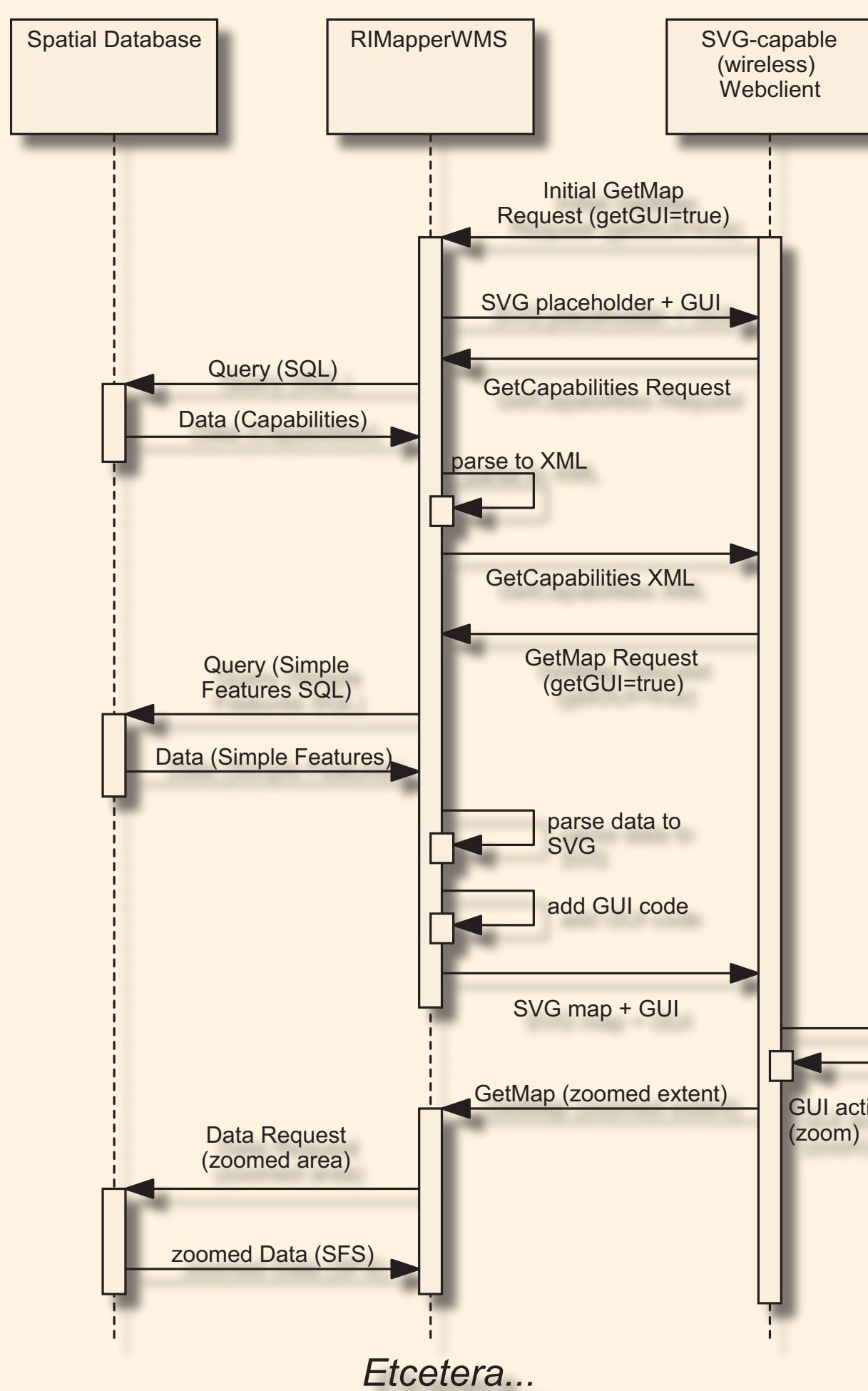


Figure 1: UML Sequence Diagram of requesting an SVG map with built-in client (`getGUI = true`)

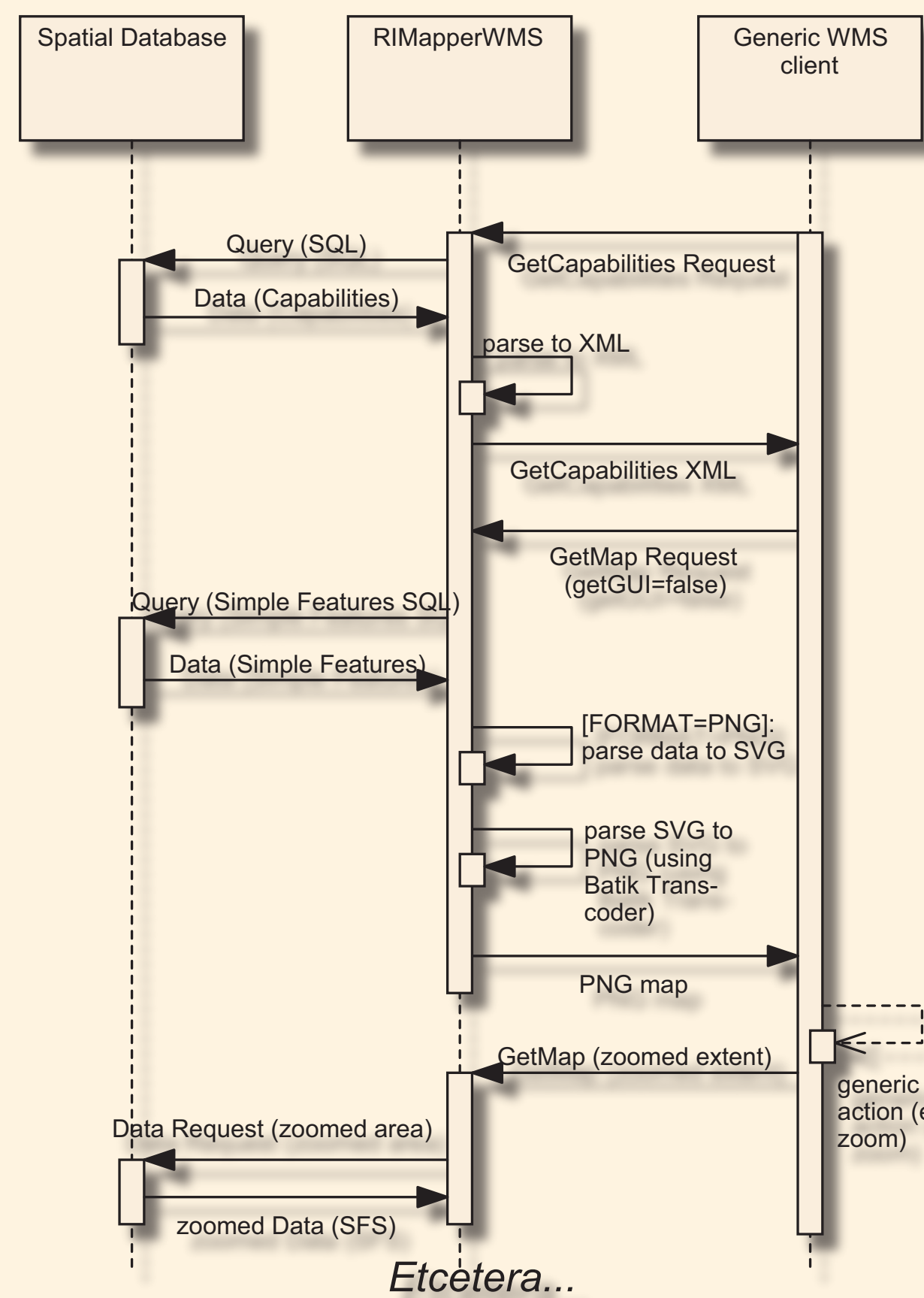


Figure 2: UML Sequence Diagram of requesting a PNG map using 'standard-mode' (`getGUI = false`)

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