

# Integration of the DBMS Oracle Spatial and Google Earth to provide information related to the Forest Inventory of Minas Gerais

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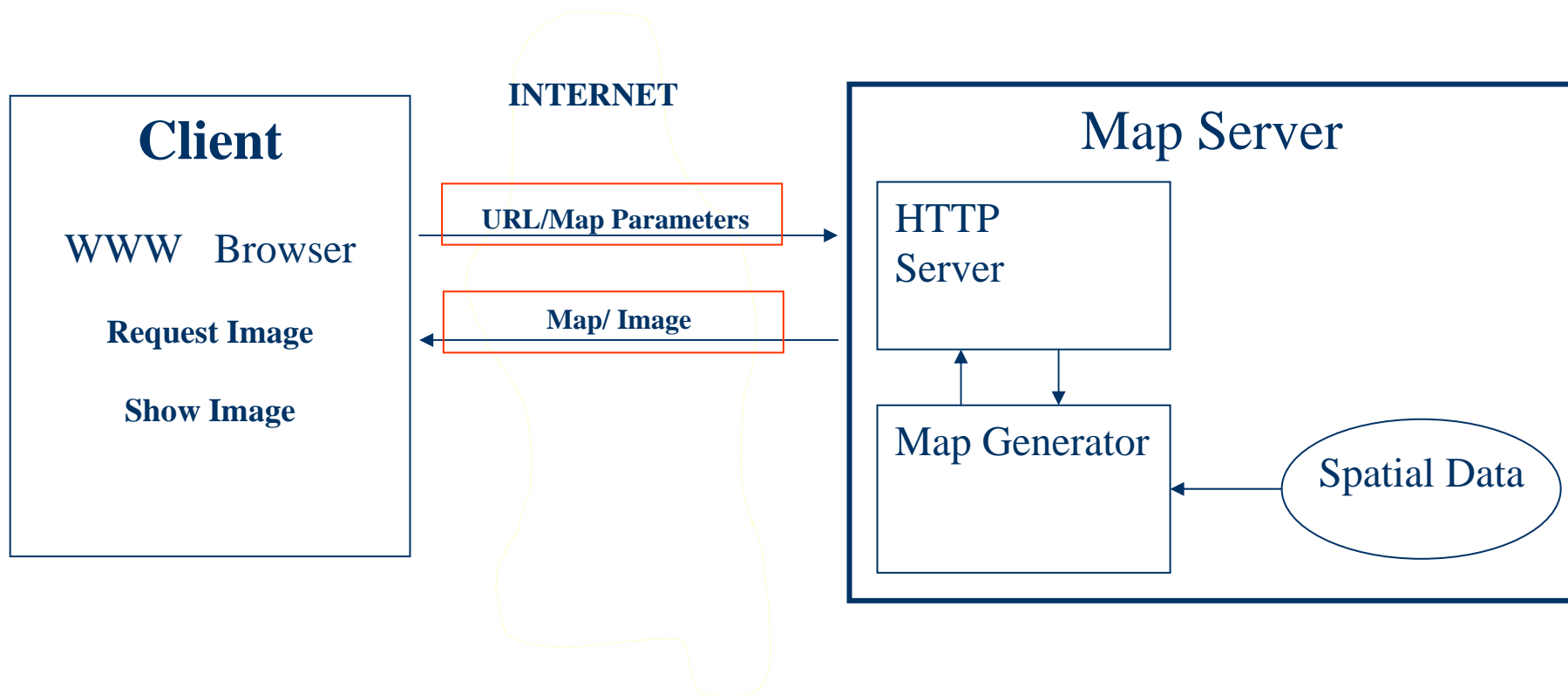
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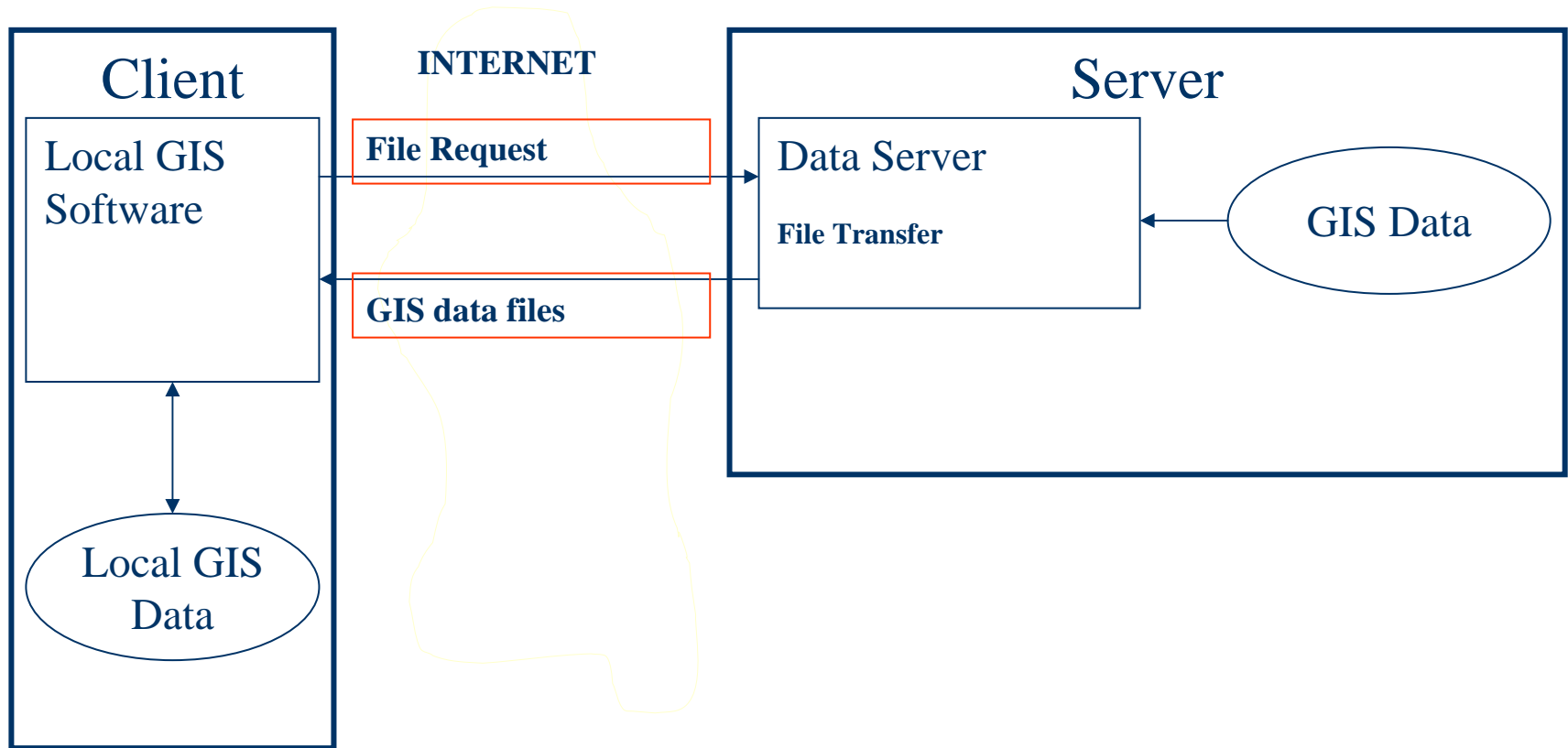
## Objectives and Motivation

- It presents the integration between DBMS Oracle Spatial and Google Earth for the development of an application over the web to provide information related to the Forest Inventory of the State of Minas Gerais.
- The motivation for this work was the need for developing a web application with GIS properties that outputs information contained in the Geographic database of the Forest Inventory of Minas Gerais in a robust, attractive and with high performance for users.

# Remote Map Server



# Remote Data Server



## Remote Map Server X Remote Data Server

Server	Advantage	Disadvantage
Maps	<ul style="list-style-type: none"><li>- There is no need to load, install or maintain any special software or data</li></ul>	<ul style="list-style-type: none"><li>- Each new research generates a new map.</li></ul>
Data	<ul style="list-style-type: none"><li>- Larger theoretical speed of processing</li><li>- Clients can make their analysis</li></ul>	<ul style="list-style-type: none"><li>- Client needs application (“plug-in”)</li><li>- Client needs to select data to be analysed</li><li>- Time to load data</li></ul>

# Technology Used

- **Oracle Spatial – Oracle DBMS Spatial Extension;**
  - **Access control**
  - **Security**
  - **Restrictions of integrity**
  - **Backup**

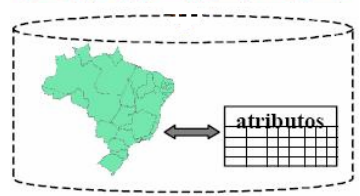
## Technology Used

- **Hyperbolic Tree - Node network navigation tool;**
- **The idea came from the need to structure and organize the information for communication and technology transfer.**
- **To achieve this idea, a particular geometry was used, in which the information is structured in the form of a tree set in a hyperbole space [Lamping, 1995] and then mapped into unit circle in an Euclidean plan.**

## Technology Used

- **Google Earth - Application that offers to the user a virtual world composed of satellite images or areas of the world;**
- ***stand-alone* program;**
- **The application was launched in 2005 by Google after the acquisition of the company Keyhole, which had originally developed the software under the title of Earth Viewer;**
- **It was freely made available for Macintosh, Linux and Windows platforms.**

**ORACLE®**



SGBD

Object Geographic



Aplicação



File KMZ



Hyperbolic Tree



File Transfer



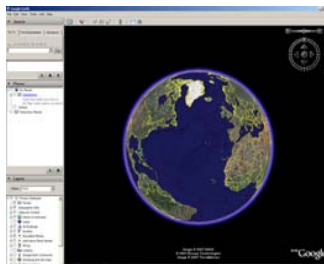
Client



Open File



Google Earth



View object



Google Earth



HiperMaps





# Contacts

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