WEB-BASED GIS APPLICATIONS USING GEOSERVER
FOR PLN MAIN RELAY STATION INFORMATION
SYSTEM IN SURABAYA

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ABSTRACT

The use of spatial data (Geographic Information System) is felt more and more necessary for various purposes such as for research, development and regional planning, and management of natural resources. Spatial data users feel the lack of information about the existence and availability of spatial data needed. The spread (dissemination) for spatial data is done by using existing media, including print media (maps), cd-rom, and other storage media provides insufficient user needs. Users are required to come and see the data directly in data provider place. This reduces the mobility and speed in obtaining information about the data.

One of the solution is to create a web-based GIS applications using geoserver. GeoServer is an open source application that can provide geospatial data through Web services and service can be accessed via the web (http). Geoserver use OGC standards (Open Geospatial Consortium) such as Web Map Service (WMS) and Web Feature Service (WFS) in presenting the map data. Map data is stored and managed in a database using the PostGIS database application. To display the map data on the web browser required openlayers client applications. Openlayers is javascript based client application to display map data in web browser with no server-side dependencies.
Web that will be made later will show Surabaya map data and information about the PLN main relay station in Surabaya. Each main relay station will be displayed with a symbol and if you clicked, it will display the features of the main relay station. This web also provides toolbox to perform the data manipulation process.

**Keyword:** Geoserver, PostGIS