New WebGIS system for geospatial data sharing of Thailand using open source software server and web service standard

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Authors made a new challenge for sharing on the mineral and geological information of Thailand. Although some efforts existed to share either standardized data format such as GML /EarthResourceML or client applications to gain access on heterogeneous data that stored in different formats from diverse sources, the usability of the access was limited due to lack of suitable data semantic encoded. The authors proposed a new method of geospatial data sharing of Thailand that are compliant to the standard format and access protocols of Web Map Service (WMS) and Web Feature Service (WFS) to overcome these problems. Our Web-Based GIS architecture is designed based on OGC service standard such as WMS, WFS and Open Source Software server. It approaches to the geological and mineral information sharing, formulation techniques of WebGIS configuration. The new method can be applied to other fields of geosciences for implementation of web-based system because there are applicable and functioning tool for server software. It has an advantage on cost efficiency in either the development or system maintenance as well.

Keywords: OGC web service, Web Feature Service, GeoServer, Thailand, mineral resources