The Overview of GeoSemantic Web Service

榮峻德

d94228001@ntu.edu.tw

國立台灣大學地理環境資源研究所　博士班學生

Advanced geographic technology has triggered out lots of geospatial data, software, hardware, and services. However, it has been produced two impediments for GIS interoperability: syntax and semantic, which is considered as high-priorities research area by NCGIA and UCGIS. In this research, we would (1) focus on semantic impediment in GIS; (2) present key concept about semantic web, ontology, and geospatial semantic web; and (3) provide the architecture for geosemantic web service, included three components: semantic portal, semantic catalogue services, and ontology management services, on spatial data infrastructure (SDI). Users can log in the semantic portal and discover suitable GIServices, included GIS data and GIS functions, with more accurate. Additionally, the geosemantic web service would also help users combine the GISerivces they discover to form a GIService chain. In the future, a geography domain would be practically applied by the architecture for extracting domain knowledge, building domain ontologies, and letting users discover and combine precise GISerivces for their geospatial tasks in the domain.

Keywords: GeoSemantic web, Ontology, GIService