Abstract

The use of the information technology in internet GIS, Remote Sensing data and World Wide Web in most of the research works relating geosciences and public is indispensable. As the nodal data banks and public utility are ever evolving along with the technological advancements, it is necessary to have an interoperable linked geospatial infrastructure for
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surface as well as underground water resources. IWML (India Water-resources Markup Language) is proposed for the monitoring of surface and subsurface water resources data of India. IWML works on can improve the performance and response time of Internet GIS application significantly. A framework of IWML and image tiling techniques for Web-based visualization for water resources management is discussed. Functioning of the web-oriented water resources information requires a leadership and management support, technical architecture, creating and sharing water resources data, adoption of standards, creation and support of community water data portals and ongoing participation. It serves the multidisciplinary users at diverse applications such as map viewing, query answering, simple mashup's analysis and visualization, customized applications for particular purposes, access to server side modeling, data discovery download for local analysis and developing a common operating dashboard for situational awareness. Water information integration with web GIS, Google, and Satellite will improve the user's ability to integrate, plan, manage and design more holistically the water resources systems.

Reference


Index Terms

Computer Science

Information Systems

Key words
Internet GIS       AJAX       Semantic Web Services
Surface and Groundwater resources
Usability