

Software and technologies for geoportal of ICM SB RAS

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Abstract

Research on design and development of software and technological support for geo-portal of ICM SB RAS are discussed. Its main components and implementation details are presented. A number of problems are discussed in details, such as web-based metadata catalog, the logic of building applications based on web services geoportal. A list of implemented information systems, based on discussed technologies is presented. The authors were directly involved in the development and implementation of geoportal based projects. In developing the software many different software libraries and components were used. Web mapping user interface was created using a number of open source libraries. To create a server-side web application authors used GIS platforms MapGuide Open Source and Minnesota Mapserv. GeoWebCache was another essential component of distributed web mapping applications. By analyzing and summarizing the experience gained creating information systems, it should be noted that the use of geoportal-based solutions in this area, can dramatically improve the efficiency of software development and problems solving.

Key words: geoportal, geographic data, metadata catalog, user interface, map applications, web services.

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