OPEN SOURCE SOFTWARE SOLUTIONS AND ITS POTENTIAL FOR SPATIAL DATA INFRASTRUCTURE DEVELOPMENT

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ABSTRACT

Considerable experience with Open Source Software (OSS) for GIS education and development of spatial data infrastructure (SDI) has been obtained as a part of initiatives undertaken in Thailand and South-East Asia. Many open source software packages can be used to implement SDI at national and regional level. The spectrum of OSS usage ranges from tools for management and analysis of spatial datasets, dissemination of standardized metadata through clearinghouses, data exchange over computer networks, interoperable web services, mobile GIS applications and capacity building of Geoinformatics specialists.

As a part of our research, several OSS packages have been installed and rigorously tested to evolve some guideline and criterion for selecting appropriate tools that could sustainably cater to individual needs and also help in building distributed and scalable mission-critical applications. In this presentation, we outline the salient features of some of these OSS tools and discuss their potential in implementing a data sharing mechanism under the Digital Asia Network framework.