

Quality of Service in a Global SDI

Ingo SIMONIS and Adam SLIWINSKI, Germany

Key words: Quality of Service, Spatial Data Infrastructure, Service Monitor

SUMMARY

During the last years, a lot of effort was put into paving the path for interoperable geographic information (GI) web services that should overcome the disadvantages and inflexibilities of monolithic GI systems. International standardization organizations like ISO or the Open Geospatial Consortium are working on specifications for self-describing GI web services that can be published, located, and invoked across a distributed computing platform, generally, the web. Dynamic cross-system and cross-organizational web service discovery and chaining at runtime allow the user to benefit from geographic data and geoprocessing functionalities that reside at different physical locations. Though a lot of technological obstacles still remain unsolved, GI web services will soon emerge to the state of the art technology in distributed geocomputing. The day the web service technology will become commonplace, GI web services will proliferate and according to Mani and Nagarajan, quality of service will become a significant factor in distinguishing the success of service providers. This paper deals with chosen issues of quality of service with regard to interoperable GI web services. Taking a rather distant point of view, the paper aims at presenting the results of a quality of service experiment that has been conducted at the University of Muenster during the GDI North-Rhine Westphalia joint project 2004. It shall broaden the view upon quality of service aspects within a global SDI.