

How to Operate a Spatial Data Infrastructure Efficiently

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Abstract:

With the ever growing size and complexity of Spatial Data Infrastructures (SDIs) the operational aspects are having an increasing financial impact on the organizations managing the various components. This presentation will look at the benefits of consolidating data and services on optimized computer hardware - so-called engineered systems - using a cloud computing approach. Experience from implementations such as the MAF/TIGER environment at the US Census Bureau will be included to illustrate the business impact of such a solution. The consolidation of the different types of geospatial data, such as 3-dimensional terrain or city models, point clouds or raster data as well as the integration of semantic query capabilities into the data management layer also has a positive effect on operational cost. Again, different scenarios will be presented along with practical use cases.

Keywords: Cloud Computing, Data Management, 3D Data, Semantic Models