Popular summary

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Creating Spatial Smart database for Malmö Municipality

The smartness of a database can accelerate the work, make high-quality database and decrease the cost of updating. This smart database can understand the smallest changes and apply appropriate responses to the changes. By applying any change in the database, all dependent information is automatically updated and manual editing is not required.

This research is provided for the GIS section of Street and Park Department of Malmö Municipality. In this study, different methods of creating a smart database, tailored to the requirements of the GIS section, are studied. Then a method is selected which is according to the facilities and needs of GIS section. Eventually a pilot database is created in the traffic area, which is called the Traffic Database.

Active Database method has been selected to create a smart database. Triggers have the most important role in the active database. By using triggers can detect any changes in the database and then make the necessary updates to the database. In other words, with any change in a table of the database, the trigger of that table is activated and makes the necessary updates according to predefined rules. For a better use of triggers, the iTRIMAN interface is designed to handle the triggers management. Finally, the database produced from this research has high data quality and high speed updates.

Keywords: Physical Geography and Ecosystem analysis, GIS Section of Street and Park department of Malmö Municipality, consistency, integration, iTRIMAN, traffic database, smart database

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Note:

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