

TrafficLarKC: Semantic Traffic-Aware Routing Using the LarKC Platform

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The popularity of location-based services and automotive navigation systems calls for a new generation of intelligent solutions to support users in mobility. TrafficLarKC [1] is a traffic-aware semantic routing service for mobile users based on the Large Knowledge Collider (LarKC) Semantic Web pluggable platform. It proposes a technique for integrating conceptual query answering with statistical learning and operations research algorithms. Empirical evaluation of the TrafficLarKC prototype shows that the traffic-aware semantic routing service works efficiently with large, heterogeneous information sources and delivers value-added services to mobile users.

The figure above shows at the bottom the datasets TrafficLarKC uses; the top-right box represents the workflows it executes, whereas the top-left part of the figure displays the rendering of the TrafficLarKC response on a mobile device. References [1] Emanuele Della Valle, Irene Celino, Daniele Dell'Aglio, Ralph Grothmann, Florian Steinke, Volker Tresp: Semantic Traffic-Aware Routing Using the LarKC Platform. IEEE Internet Computing 15(6): 15-23 (2011)