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Piloting map service for navigating in punctuality analysis for trains

June 17, 2014

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1 Background

A train network is a complex system. Almost every running train have the possibility to affect almost every other train running in the system. When you look at a busy area, such as a major city and it's closest area, a great deal of material can be on the move at any given time on a limited rail network. This leads to limited time slots for each train and every problem can lead to major problems, not just for the train experiencing the problem, but can spread to other trains.

To minimize delays it may be necessary to improve both infrastructure and/or time table on railway routes or parts of routes. However, to understand what needs to be improved and optionally where, you need a good tool to analyze the rail network capacity[1], and if necessary, visualize individual trains[2] to follow delays to the source.

Bibliography

[1] A. Landex, "Gis analyses of railroad capacity and delays," in *Proceedings of ESRI User Conference. San Diego, California, USA*, pp. 1–10, 2009.

[2] OpenDataCity, "Zugmonitor – leider außer betrieb." `http://zugmonitor.sueddeutsche.de/`. [Online; accessed 15. February 2013].

Randall Munroe, "Glass Trolling", `http://xkcd/1304/` [Online; accessed 16. December 2013]