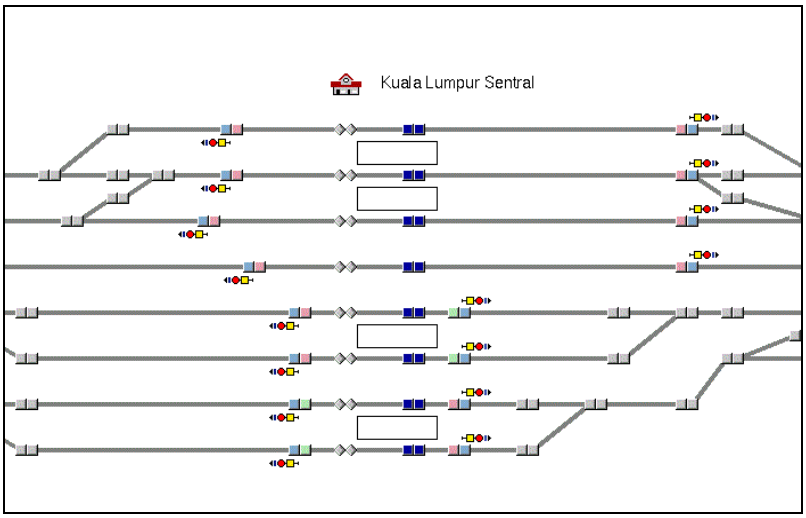
RAIL SYSTEMS ENGINEERING

OPENTRACK

Simulation of Railway Networks



OpenTrack – The Software

In today's world of big Railway Projects in all countries and Railway operations, Optimizing Simulation is an important tool needed to achieve project targets and operational improvements.

OpenTrack is the state of the art simulation software, designed for Operations Departments, Project Planning, and Government consultants to conduct study of Operations, Timetables, as well as Line and Signaling Layout verification.

OpenTrack is a planning and simulation tool developed at The Swiss Federal Institute of Technology Zurich and supplied to over 116 organizations in 24 different countries.

Rail Systems Engineering Sdn. Bhd. is the South East Asian representative for OpenTrack Simulation Software. On top of the software purchase, training for software familiarization and simulation studies is available. Based on past project experiences, we provide simulation study analysis for clients as well.

OpenTrack Users

SBB CFF FFS

TransAdelaide

SNCF

广州地铁 Guangzhou Metro

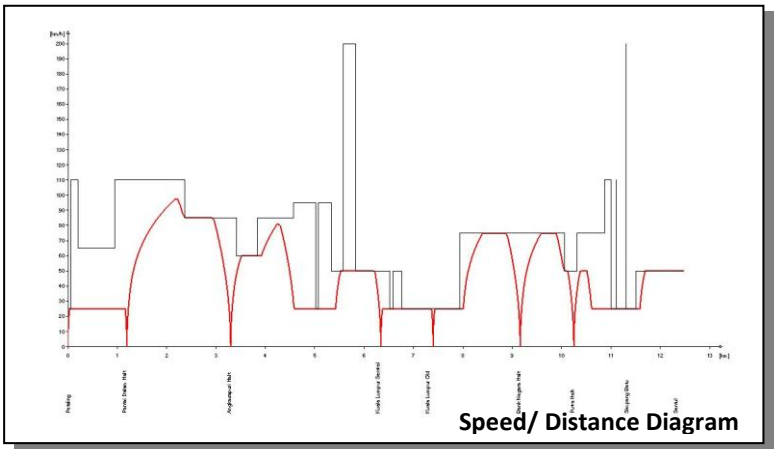
深圳地铁 SHENZHEN METRO

DB Mobility Networks Logistics

SIEMENS

Core Application

- **Runtime Simulation**
- **Headway Simulation**
- **Design Verification**
- **Train Capacity Verification**
- **Power Usage Studies**
- **Timetable Verification**
- **Visualization of Operations**

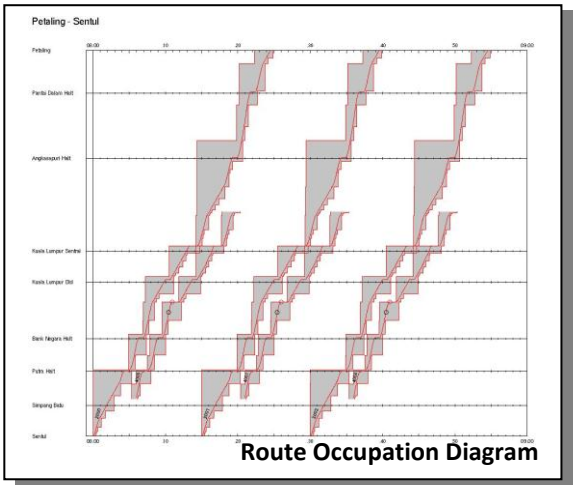


Speed/ Distance Diagram

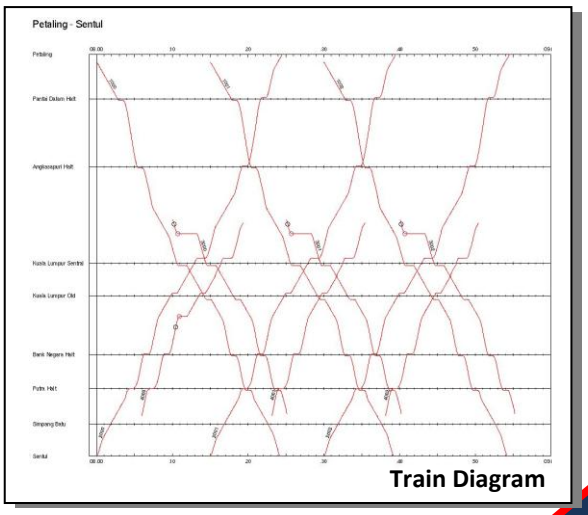
Simulation

OpenTrack allows user-defined trains to fulfil the specified timetable on track layout.

- Graphical visualization on rail operation
- Localizing capacity bottleneck
- Evaluating how disturbances affect the network as a whole
- Evaluating and designing signalling systems
- Optimizing rolling stock scheduling



Route Occupation Diagram



Train Diagram

Evaluation

OpenTrack performs a variety of different evaluations using the simulation data. These evaluations can be made on several different perspectives, for example, per train, per route, per station.

- Route conflict detection
- Tractive effort
- Acceleration behaviour
- Breaking behaviour
- Power consumption

Rail System Engineering Sdn Bhd
Kuala Lumpur, Malaysia

Philipp Goetz
Tel +60 12 659 1391
Philipp.goetz@railsystemengineering.com