



Effective Timetable & Network Capacity Management

HaCon's TPS solutions for train planning and capacity management enable network providers and operators to make the most of their infrastructure. Our train planning system helps railway infrastructure managers as well as train operating companies to significantly improve their work and business processes regarding operative timetable planning.

As a modular toolbox and high-performance software solution, TPS combines infrastructure, timetable and train path management as well as all interaction. From strategic long-term planning to annual timetables to short-term planning based on real-time data during operation: Benefit from flexible TPS editions and modules. The system can be adapted to a variety of needs in train path and timetable management.

Tailored to Your Needs

Highly flexible and configurable solutions for railway networks of any size. TPS creates reliable timetables from strategic long-term planning to real-time train dispatching.

High Performance

Multi-user operation is a central element in the software architecture. As a result, trains can be processed by various planners from different organisations on different locations at the same time. Rights, roles, groups and users can be precisely defined.

Fits in Your IT Environment

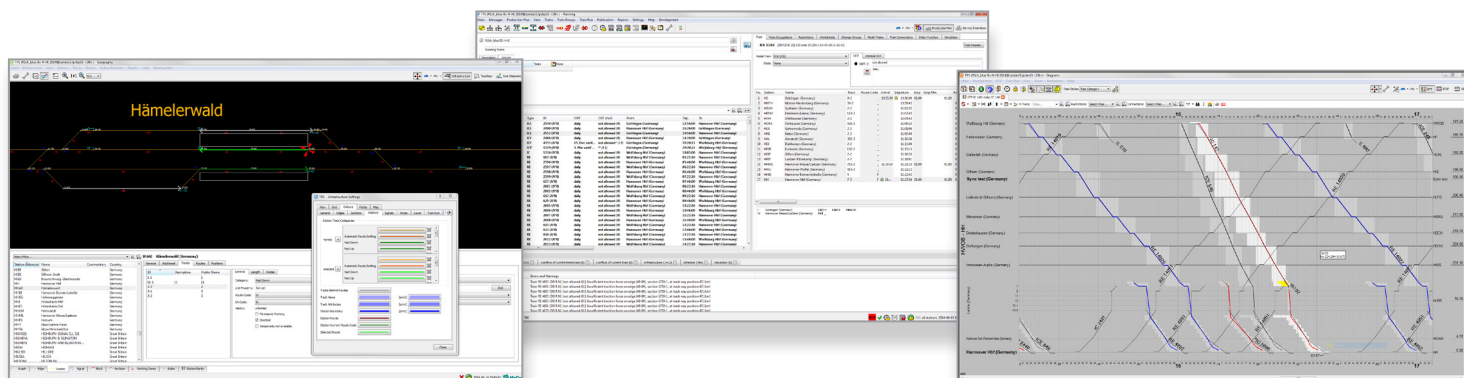
TPS provides several automated interfaces (e.g. web services) and thus optimally interacts with other systems. Customer-specific functions can be easily integrated. This way, the software perfectly adapts to existing IT infrastructures.

TPS at a glance

- Timetable management
 - » Runtime calculation
 - » Seamless integration of closed tracks and speed limitations
 - » Automated search for conflict-free train paths and synchronization with current timetable
 - » State-of-the-art graphical features: track infrastructure, graphical timetable, track occupation plan and various output options
- Sophisticated data integration via various interfaces
- Static or dynamic access to occupation data
- End-to-end bid-offer process for infrastructure managers and train operating companies
- TPS Online for conflict detection and resolution with comprehensive review and preview functionality
- Integrated simulation functionality
- Capacity analysis according to UIC 406
- European Communication Standard TAF TSI
- railML® certified

Planning with Overview: The TPS Workspace

Three side-by-side screens visualize the infrastructure network, the train paths and the schedule, respectively. Editing train paths is easy and intuitive in all three editors and planners quickly get an overview of all essential functionalities. With changes made in one editor, the main windows are automatically synchronized with each other.



Infrastructure maintenance is performed in the **Geography Editor**. Here, users can choose between a network or a line display and even view the tracks along the routes and in the train stations in microscopic detail. Line closures, construction sites etc. can be seen at a glance.

Once the train paths have been created, the **Planning Editor** allows to maintain them, plan new ones and add construction activities. Each path is listed with its respective calculation, validation and publication status.

The **Diagrams Editor** visualizes information on track occupations and possible train path conflicts. Planners can choose between a route-specific time/path view (Graphical Timetable), a station-specific time/track view (Interactive Track Occupation Plan) and a calendar-based view.



About HaCon: HaCon provides cutting-edge software solutions for public transportation, mobility and logistics. Our three business units, HAFAS, TPS and Consulting, provide more than 370 highly qualified specialists and 35 years of experience for your success. Since 2017, HaCon has been a member of the Siemens family. From trip planning to mobile ticketing and fleet management; our HAFAS product suite covers all aspects of Intelligent Transportation Systems and creates the ultimate end user experience; this is why our software is considered the highest industry standard for trip planning throughout the world and prompted the Massachusetts Institute of Technology (MIT) to honor HaCon as one of the "50 Smartest Companies" worldwide. HaCon's TPS solutions for train planning and capacity management enable network providers and operators to make the most of their infrastructure. For more specialized projects, our consulting team empowers our clients to manage complexity with ease and offers customer-specific solutions for rail freight and combined transport. Headquartered in Hannover, Germany, HaCon also holds offices in Berlin, Paris, and London.



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