

Public WLAN and fleet management in a single system

Reference report on the Rhaetian Railway's WLAN solution



Thanks to the powerful WLAN connection on our trains, our passengers can share their impressions directly with loved ones at home.

René Keller, Head of Rolling Stock Projects, Rhaetian Railway

Initial position

In 2016, onway ag (formerly WLAN-Partner AG) installed public WLAN at the Rhaetian Railway (RhB) station in St. Moritz as part of a pilot project. Further stations in the RhB network followed. This powerful WLAN is now also being made available to passengers on the train.

The RhB already had its own infotainment solution in the Bernina and Glacier Express vehicles. In establishing an internet connection, the company sought to meet the following requirements:

- Passengers can connect to the infotainment via WLAN and still access other activities online, such as chats, social media, etc.;
- All requirements of the Federal Act on the Surveillance of Post and Telecommunications Traffic (SPTA) are met (e.g. identification obligation);
- Fleets can be managed via the same solution.

Decision

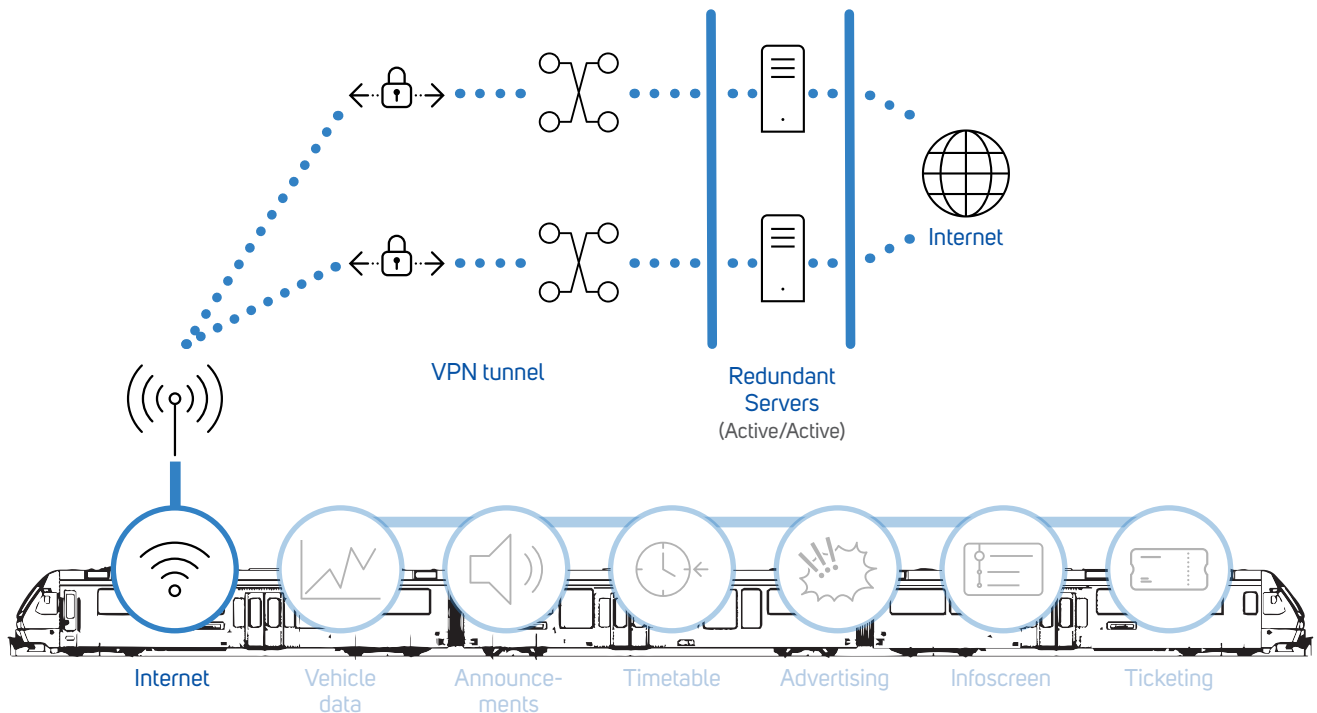
The following points convinced RhB that onway's solution was the most suitable:

- Ongoing legal protection of all public WLAN internet access points via the same portal and system – continuous flow of information for both trains and stations;
- Passengers only need to register once in a six-month period using an SMS token;
- Central management system for monitoring and managing the entire fleet;
- Ability to offer different usage models for passengers and company employees.

Solution

On the hardware side, the RhB used mobile routers in the ON3800 series, certified by our partner [NetModule AG](#), to simply network large fleets. All data traffic from the vehicle is consolidated using these vehicle routers and routed through a secure VPN tunnel via the mobile network to onway's data centre.

The VPN tunnel terminates here. The data centre fulfils all central functions such as user authentication, filtering and monitoring user traffic, as well as limiting bandwidths and fulfilling the legal requirements according to the SPTA.



Rhaetian Railway · Rhätische Bahn AG (RhB)

With around 1600 employees, the RhB transports twelve million passengers on adventurous journeys through Graubünden every year. One third of the 385-kilometre-long route network is 1500 metres above sea level. One third is also a UNESCO World Heritage Site. Thanks to the panoramic Bernina Express and Glacier Express trains and with the Rhaetian Railway in the Albula/Bernina Landscape being named a UNESCO World Heritage, the railway enjoys a global reputation.

By running regional and goods trains, as well as providing car transport through the Vereina tunnel, the RhB ensures reliable transport chains in the canton of Graubünden.

onway

Since 2004, the team at onway ag has been supporting customers to evaluate, plan, implement and operate their WLAN/Network Access Control solutions, as well as offering ongoing support. To date, the team has successfully completed over 100 projects. We would be delighted to support you with your project.