

Central vehicle network infrastructure in public transport



Reference report on the Wi-Fi solution of Aargau Verkehr AG



Initial situation

Aargau Verkehr AG (AVA) was looking for an integrated communication solution to offer passengers even greater convenience and to simplify communication between the individual vehicles and the control centre. The aim of this solution was to provide passengers with a high-performance Wi-Fi free of charge and to offer them the opportunity to obtain useful travel information in real time or to surf the Internet, for example. In addition, the vehicle's GPS data was to be transmitted to the control centre so that it was always informed of the current location and speed of its vehicles.

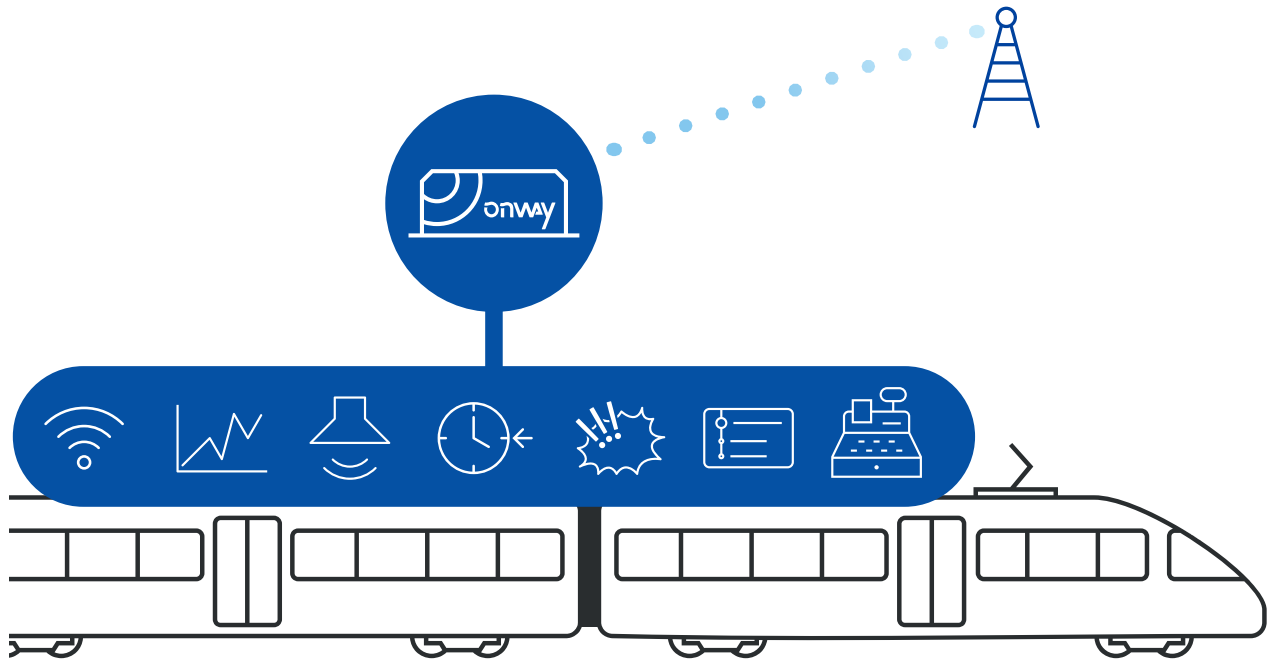
AVA's special requirement in this project was that the two routers per train should act as a redundant redundant clusters and thus guarantee a highly available train-land connection.

Decision

As a leading provider of an open and flexible ITC basic infrastructure for public transport, onway was able to realise this exciting project together with Stadler Rail and AVA. The onway basic infrastructure can be used for a variety of applications – whether for communication between the vehicles and the outside world or as a mobile data centre for operating a wide range of onboard applications such as infotainment, video surveillance, ticketing, passenger counting, etc.

Solution

For external communication, two certified onway railway routers ON3800 with 2 x LTE Advanced were used in this project, which operate as a redundant cluster. All comfort applications such as passenger information, passenger counting, infotainment etc. are also connected in the vehicle via a Gigabit Ethernet connection. This means that a separate router is no longer used for each application, as was often the case in the past. Instead, all communication requirements are provided via a single, fully redundant, integrated communication system.



Aargau Verkehr AG

Aargau Verkehr (AVA) transports over 23 million passengers a year by bus and train between Zofingen and Zurich Altstetten. The company's aim is to provide its customers with a pleasant travelling experience by offering a high quality of service, modern and environmentally friendly vehicles, up-to-date information channels and competent advice.

onway

Since 2004, the onway ag team has been supporting its customers in the evaluation, planning, implementation, operation and support of their Wi-Fi/network access control solutions and has already successfully realised more than 100 projects. We would be happy to support you with your project.