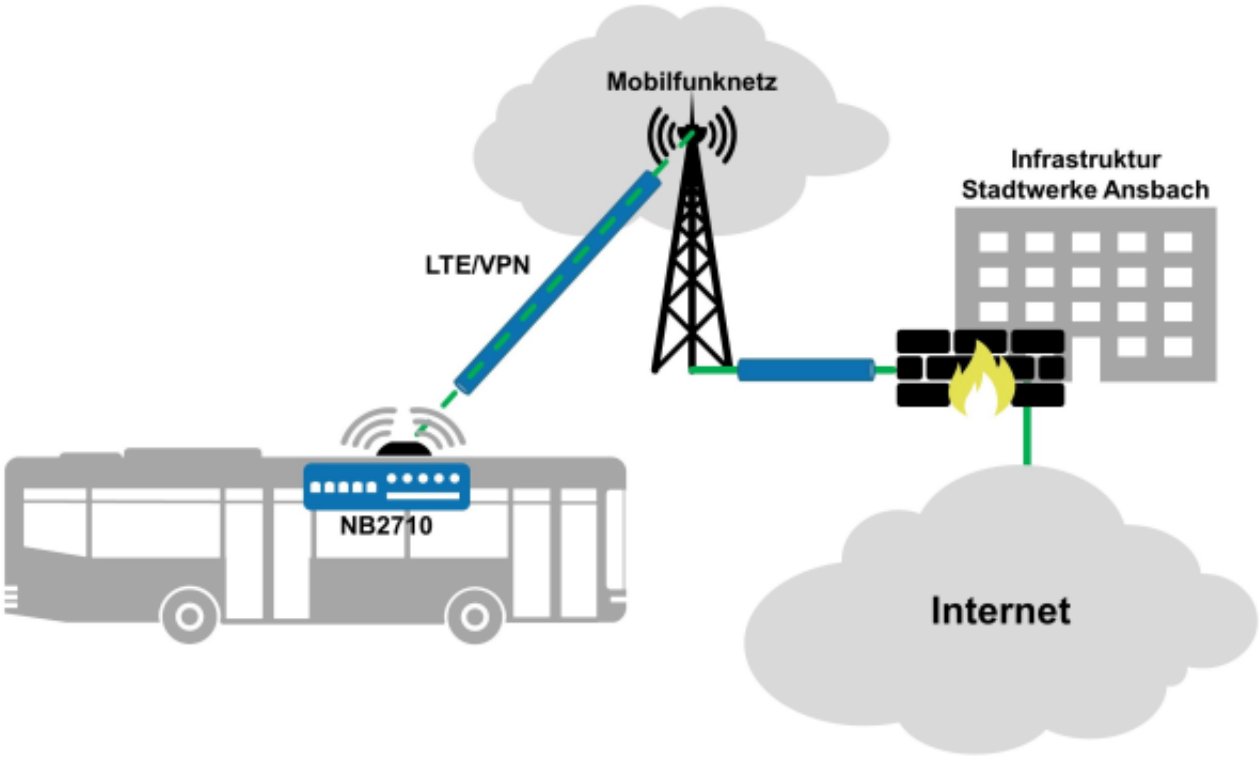
Success Story Stadtwerke Ansbach ? Free WiFi for Passengers

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The Project

The innovative company Stadtwerke Ansbach serve its rail network of a total length of approx. 145 km with 14 buses at hourly and half-hourly intervals and transport more than two millions of passengers per year. Since September 2015 they provide a new service and now offer free WiFi in their vehicles.
The service is used actively by the passengers and is becoming increasingly popular. Hence, Stadtwerke Ansbach have achieved their aim ? after all, the smartphone is a fixed part of the daily life and more and more people use the internet on the go.
The passengers merely have to accept the terms of use once and can then surf the internet without any time or volume restrictions. For the protection of minors questionable sites get automatically blocked.To bring the internet on to the bus and to provide access to the passengers, Stadtwerke Ansbach use the routers of NetModule.

Requirements

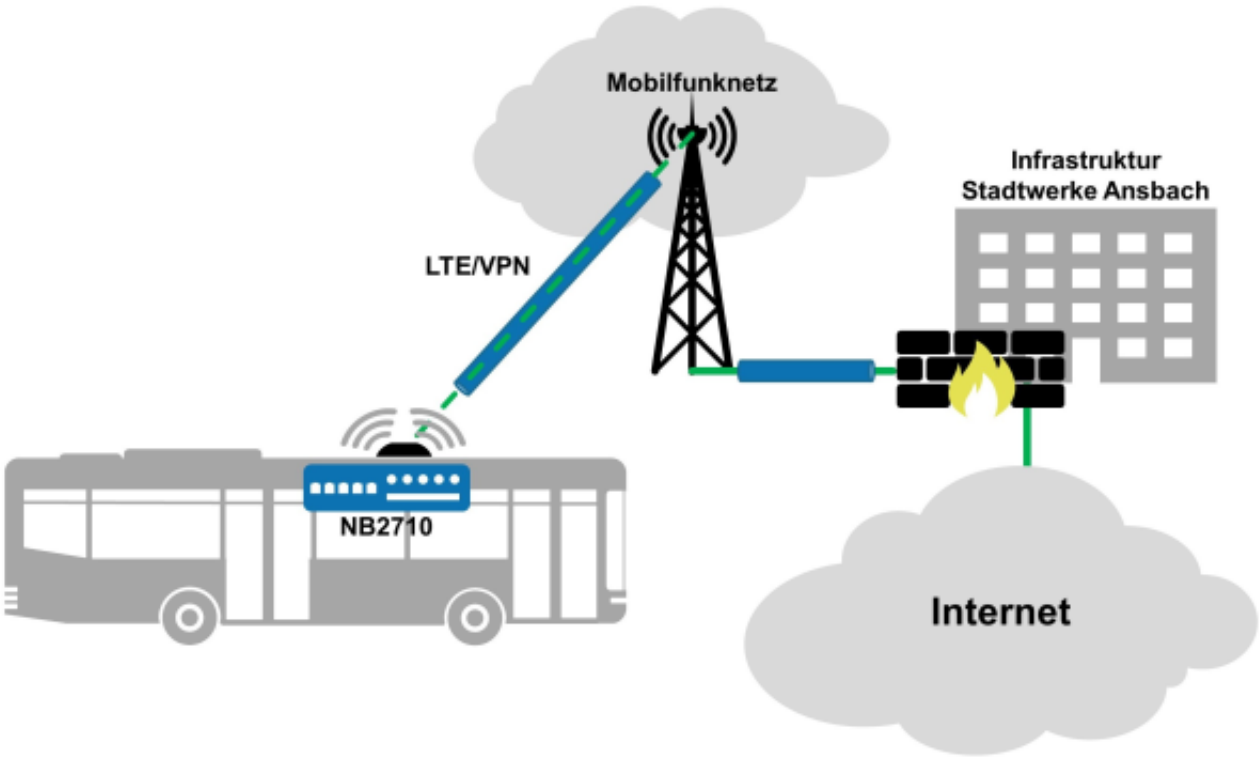
In order to be able to provide a reliable service, the following requirements have been defined and have to be fulfilled by the routers:

- Certification for use in buses
- Robustness against vibrations and high temperatures
- Communication over LTE and WiFi IEEE 802.11n
- Ability to establish VPN tunnels

Solution

After a trouble-free integration, Stadtwerke Ansbach now use NetModule routers of the variant NB2710-2LW-G. This model is certified according to E1 automotive and is vibration and shock resistant. Moreover, it is designed for a temperature range of -25 ° C to +70 ° C. The routers integrate two LTE mobile modules, thus bringing the Internet reliably in the vehicle. The also built-in WiFi module with IEEE 802.11n standard acts as an access point for the passengers. By means of the additional GPS module, Stadtwerke Ansbach can exactly locate their vehicles at any time.

The routers provide a captive portal and establish a VPN tunnel over the cellular radio system to the network of Stadtwerke Ansbach. There are stored the terms of use and all the network traffic of the passengers gets analyzed by a firewall. The firewall also scans for viruses and filters for minors questionable requests. Also, file sharing and any updates of the passenger?s devices get blocked because of legal purposes and that one single passenger cannot consume the available bandwidth for himself. Stadtwerke Ansbach, as a telecommunications company, offers this infrastructure with the associated services to other transport companies.



For the communication over the mobile network, Stadtwerke Ansbach uses two SIM cards. One serves exclusively for the passenger WiFi and the second for various other IT applications such as passenger counting. This leads to a clear separation of passenger and operating data and also a specific billing gets easier.

With this new offer, Stadtwerke Ansbach have created a real value for their passengers and thus increased customer loyalty and satisfaction. The solution is manageable, easy to maintain and due to the flexibility of NetModule routers to be extended straightforward with further applications.