Scalable hotspot platform for cities and transport

Reference report on the MDCC public Wi-Fi platform

> Our goal was to consistently expand the existing Otto hotspot network from the urban area to buses and trams. The onway platform provides us with the necessary technical basis to deliver a reliable and scalable end-to-end Wi-Fi experience.
>
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Initial Situation

MDCC Magdeburg-City-Com GmbH already had an existing hotspot network, but it was increasingly reaching its limits in terms of functionality and scalability. In particular, there was a lack of a flexible, dynamic platform to efficiently serve different customer segments and map new use cases. MDCC had the following requirements for an expanded solution:

- Dynamic hotspot platform instead of static individual solutions
- Seamless expansion of public Wi-Fi from stationary city hotspots to public transport vehicles (Magdeburger Verkehrsbetriebe MVB)
- Clear multi-tenant capability to offer connectivity as a service to different customers and partners
- Compliance with all local legal requirements for the operation of public Wi-Fi networks
- Centralised control, scalability and operational reliability combined with high performance

Decision

That is why MDCC chose the onway solution:

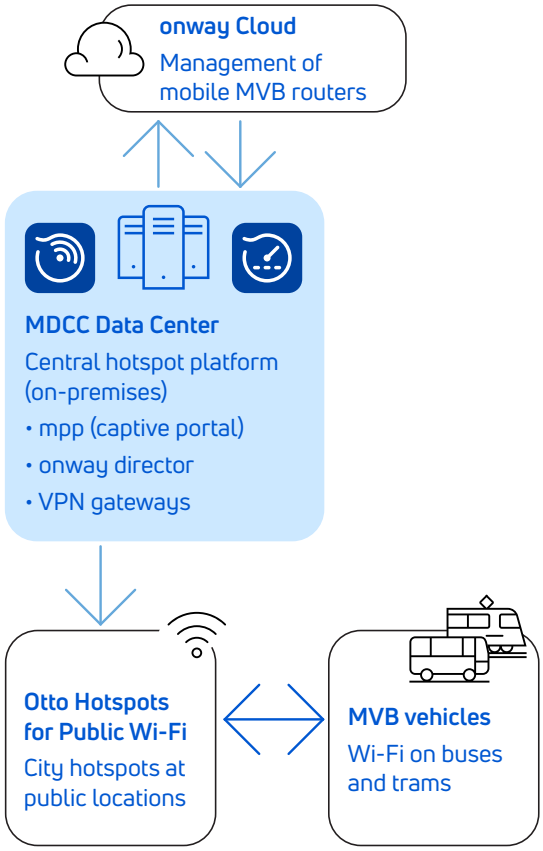
- Multi-client hotspot platform for mapping different customers, locations and business models with high scalability for future growth
- Uniform solution for stationary and mobile hotspots
- Clear separation of data, management and customer levels
- Flexible operating models (on-premises and cloud components can be combined)

Solution

The onway solution was designed to give MDCC full control over the central platform while allowing mobile units to be integrated efficiently.
All core components were installed directly in the MDCC data centre:

- **mpp** as captive portal, router, firewall and content filter
- **onway director** as central management and orchestration system
- redundant VPN gateways for secure connection of MVB vehicle

This means that MDCC operates the entire hotspot platform independently in its own data centre and maintains maximum data sovereignty.



Mobile hotspots in public transport (MVB)

The routers in MVB vehicles are managed centrally via the onway cloud. This allows:

- New vehicles to be put into operation quickly and in a standardised manner;
- Configuration changes to be rolled out centrally;.
- Stable and secure VPN connections to be established between vehicles and the data centre.

The seamless transition from the city hotspot to the bus or tram provides users with a consistent Wi-Fi experience.

MDCC Magdeburg-City-Com GmbH

MDCC is the regional telecommunications provider for the city of Magdeburg, offering internet, telephony and television services for residential and business customers. In addition, MDCC operates public Wi-Fi networks across the city and, together with partners such as Magdeburger Verkehrsbetriebe (MVB), provides a modern digital infrastructure for customers, passengers and visitors to the city.

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onway is the leading provider of customized communication solutions for all areas of modern network infrastructures. We support more than 150 customers across various industries with the design, implementation, operation, and support of secure ICT infrastructures. Our own products include a multi-tenant smart access solution, public hotspots, and mobile solutions for public transport vehicles. In addition, we integrate communication solutions from established manufacturers, creating seamless, future-proof networks. The onway Group is fully certified according to ISO 9001:2015, ISO 14001:2015, and ISO/IEC 27001:2022.

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