

GemeindeWerke Telfs modernizes VPN site networking



Everything under control from the office, full visibility via the cloud

The Austrian market town of Telfs lies at the foot of Mount Hohe Munde and, after Innsbruck and Kufstein, is the third-largest municipality in Tyrol. GemeindeWerke Telfs is responsible for electricity generation, drinking water supply and wastewater disposal, as well as cable TV and internet services. The surrounding mountains ensure that the municipality has access to ample water, which is used for power generation at the hydroelectric plants and for the drinking water supply. When the components for the IT infrastructure and site networking of the power plants and elevated reservoirs were due to be renewed in 2024, the choice fell on the German network infrastructure and security manufacturer LANCOM Systems. Telfs is thus focusing on security, digital sovereignty, and centralized management from the cloud.

For municipalities or local authorities such as Telfs, VPN-based site networking is the solution of choice for securely and cost-effectively connecting distributed remote facilities. At GemeindeWerke Telfs, VPN routers are used to establish connections to the six hydroelectric power plants and 13 water and wastewater facilities. As the devices in use had become outdated, a replacement purchase was necessary. IT service provider Kufgem provided valuable support in the investment decision. Gregor Bissinger, administrative manager at GemeindeWerke Telfs: "In the past, Kufgem has always provided us with sound advice on IT matters. When they recommended LANCOM products to us, we trusted their judgment immediately."







"What used to require time-consuming manual, on-site configuration is now handled in the cloud. A solution like the LANCOM Management Cloud saves a lot of time. This is a major advantage, especially for more complex configurations, as all devices can be managed centrally in the cloud."

Florian Weratschnig, IT System Engineer at Kufgem

Backdoor-free and BSI-certified

Since GemeindeWerke is considered part of critical infrastructure due to its importance to the population, security was the top priority. LANCOM Systems, as a German manufacturer, meets this requirement with backdoor-free and routers certified by the German Federal Office for Information Security (BSI). A LANCOM VPN solution is also a cost-effective option for securely encrypted networking of multiple sites, including those located farther apart. As in Telfs, the GemeindeWerke network extends across a geographic area of more than 45 square kilometers. The hydroelectric power plants are distributed across the entire municipal area, with individual sites located in forested areas and on elevated terrain. In addition, there are 13 elevated reservoirs for the drinking water supply, some of which are located more than a 20-minute drive from the municipal area. These remote facilities were to be connected to the GemeindeWerke network via VPN. To guarantee maximum security, IPsec was to be used to establish the connection.

Another objective to be achieved with the new solution was centralized management and monitoring. A stable and scalable network architecture, including real-time communication and centralized management, is essential when it comes to monitoring electricity and water supply. LANCOM was also able to meet this requirement with its routers and switches as well as cloud-based network management.

Easy roll-out

Following the planning phase, the migration began. The LANCOM GS-3510XP, GS-3126X, and XS-5110F switches were primarily deployed for the IT infrastructure at the headquarters. LANCOM 1650E VPN routers were used to connect the hydroelectric power plants and elevated reservoirs, enabling Gregor Bissinger and his team to access them from the office.







"The transition went smoothly from start to finish. The network has been in operation for almost a year now.
The system is running stably and without interruptions."

Gregor Bissinger, administrative manager at GemeindeWerke Telfs

LANCOM provided hands-on support during the configuration of the devices. Florian Weratschnig, IT System Engineer at Kufgem: "Together with the LANCOM technician, we first set up an initial configuration. After a few attempts, the basic configuration was perfect and we were able to apply it to the other fourteen routers. In this way, the facilities were connected gradually – reservoir by reservoir and power plant by power plant. It was relatively easy to roll out via the cloud."

Always keeping everything in view

GemeindeWerke uses a control system to monitor the entire water supply of Telfs and control the pumps. At the six power plants, staff also handle remote maintenance: from the office, the team can access current operating data and can even remotely shut down or start the newer plants.

The administration of the VPN routers is not handled by GemeindeWerke itself, but by LANCOM partner Kufgem. Via the LANCOM Management Cloud, LMC for short, configurations, changes and firmware updates can be managed remotely from the Kufgem headquarters in Kufstein.

Florian Weratschnig explains: "The advantage of the LANCOM Management Cloud is that the client can decide for themselves who will take care of the network maintenance. Since GemeindeWerke Telfs has limited resources and in-house expertise for network maintenance, it has outsourced this task to us."

Over a year of smooth operation

The advantage of the new solution is that, thanks to the LANCOM Management Cloud, the devices are always kept automatically up to date.

Florian Weratschnig: "What used to require time-con-

suming manual, on-site configuration is now handled in the cloud. A solution like the LANCOM Management Cloud saves a lot of time. "This is a major advantage, especially for more complex configurations, as all devices can be managed centrally in the cloud."

The results for GemeindeWerke and Kufgem are consistently positive: "The transition went smoothly. The network has been in operation for a year now. The system is running stably and without interruptions," Gregor Bissinger concludes with satisfaction, summarizing the modernization project.







The client

The service portfolio of GemeindeWerke Telfs includes the supply of drinking water, wastewater disposal, energy generation from six hydroelectric power plants as well as photovoltaic systems, connection to a high-speed broadband network with internet, cable TV, and fixed-line telephony, electrical installations, charging infrastructure, and numerous services provided by the municipal works department as well as the Red Zac electrical retail store.

The partner

Based in Kufstein, Kufgem is a full-service provider of efficient and modern IT solutions for municipal administration. Since 1991, Kufgem has specialized in providing companies with the optimal IT infrastructure.

At a glance

The client



GemeindeWerke Telfs GmbH

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The partner



Kufgem GmbH

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Requirements

- → Renewal of the components for IT and VPN site networking with switches and routers
- → BSI certification
- → Reliable hardware
- → High availability

Utilized components

Switches:

- → LANCOM GS-3510XP
- → LANCOM GS-3126X
- → LANCOM XS-5110F

Router:

→ LANCOM 1650E

LANCOM Management Cloud





