MOUNTAIN RESCUE & TRANSPORTATION

Faster above the clouds with networks from the Cloud

In mountain rescue, every second counts – this is why the long-established Swiss helicopter company Air Zermatt has opted for a state-of-the-art network infrastructure.

The helicopters of Air Zermatt, with their red and white stars, are known in mountain rescue not only for their risky air operations. In their 50-year history, the "Red Helis" have rescued hundreds of people from emergency situations in the mountains and saved the lives of many alpinists and winter sports enthusiasts. Since every second counts in an emergency, the rescuers have outsourced their IT to the Cloud to ensure prompt and precise preparation of their missions. Today, a state-of-the-art software-defined IT network reliably ensures that all the necessary data is collected and provided at maximum speed. The technology comes from the German network manufacturer LANCOM, the service from the data center of Seabix, a Swiss managed service provider.

The sky over the Matterhorn is blue and the sun is shining: a perfect winter's day in the Valais Alps. But the mountain idyll is deceptive. An emergency call has just been received by the mountain rescue team in Zermatt, to say that a skier has had an accident on the slope. Time is now of the essence. The ground crew has been alerted and is starting preparations for the rescue mission. After only a few minutes, the red helicopters of Air Zermatt, with their red and white stars, are in the air and on their way to the scene of the accident, to fly the injured party to the nearest hospital as quickly as possible.

Large amounts of data are needed in preparation for the rescue operations, and for transport flights with the helicopters. Very importantly, fuel requirements have to be determined, and takeoff and landing times calculated. In addition, briefings and their preparation depend heavily on

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> "Thanks to the professional solution from Seabix and LANCOM, we can now concentrate fully on our main task – flying!"

Gerold Biner, CEO at Air Zermatt

the availability of IT services, such as Internet connection, Wi-Fi and IP telephony. Only when everything works smoothly and in synergy can the rescuers start off on their missions quickly and ideally prepared.

Reliability and speed are the key cornerstones of mission preparation. "With the flood of information we require and have to process as quickly as possible before a mission, the need for reliable IT and, above all, network infrastructure has considerably increased," explains Gerold Biner, Air Zermatt's CEO. "Stable and fail-proof communication during a mission can make the difference between life and death."

Time-consuming network management

The team at Air Zermatt consists primarily of rescue workers and pilots. Before the IT was outsourced to Seabix, employees took care of in-house IT in their free time at the three locations: network monitoring, analysis and troubleshooting cost valuable time that they had to save elsewhere. Long delays were often the norm until an appropriate employee on site was able to restore availability of a critical resource, such as Internet or telephony, by themselves after a failure. For air

mountain rescue, where often every minute counts, this situation was unacceptable over the long term. In addition, systems of different manufacturers had been deployed for installation and management of the networks. High maintenance requirements, higher costs and increased susceptibility to error were the consequence.

To work faster, more reliably and, not least, more economically in the future, Air Zermatt decided to outsource the complex task of network provision to an external partner. At the top of its wish list: a network completely from one source – from the Internet connection, through to Wi-Fi and telephony. This was to be made available and administrated from the Cloud by a managed service provider (MSP), and was to ensure maximum failover reliability in day-to-day operations. The increased data protection requirements in Switzerland were also to be met with this step.

High requirements

The list of technical requirements for the new solution was long. In addition to improved Wi-Fi coverage at the three locations, via which wireless telephony by Voice over WLAN (VoWLAN) was also to be provided, it was particularly important to increase the Quality of Service (QoS) of the network. Besides this, virtual networks (virtual LAN or VLAN) were to ensure maximum on-site data security. In turn, continuous updates were to future-proof the system and comprehensive remote monitoring and management enable rapid intervention in a crisis. The basic prerequisite for this: reliable real-time monitoring.

"Made in Germany"

The Cloud partner for the project was found quickly: Seabix AG in Villmergen, Switzerland. After extensive research, German network manufacturer LANCOM Systems was chosen to provide the networking solution. With

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a comprehensive hardware portfolio and the LANCOM Management Cloud, LANCOM uniquely combines cutting-edge Cloud- and software-defined networking technologies (SDN) with reliable routers, Wi-Fi access points and switches. With these, the company optimizes the management of complete network infrastructures sustainably and securely.

"We were particularly impressed with the time saved by the proactive monitoring and with the increase in efficiency from easier operation," emphasizes Thierry Kramis, CEO at Seabix AG. With the aid of LANCOM's professional hardware and Cloud solution, the MSP can support and monitor the networks of Air Zermatt centrally through a single Cloud-based management system – completely independent of location via a simple Internet connection. The high data protection and compliance requirements also spoke for LANCOM. The company develops and produces its solutions in Germany, and the LANCOM Management Cloud – the heart of the new Air Zermatt network – is "Made in Germany" as well.

More time for mountain rescue

Outsourcing the network to Seabix, and conversion to the all-in-one solution from LANCOM, has already proved its value for Air Zermatt after just a short time. CEO Gerold Birner is highly satisfied: "Thanks to the professional solution from Seabix and LANCOM, we can now concentrate fully on our main task – flying!"

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Customer

The helicopter company Air Zermatt, based in Upper Valais, Switzerland, has been synonymous with reliability and speed in mountain rescue since 1968. Thanks to its expertise and wealth of experience, the helicopters with the red and white stars are known throughout the world. For 50 years, the pilots have been rescuing injured alpinists and winter sports enthusiasts from mountains and crevasses, and carrying out transport and tourist flights.

Partner

The Swiss managed service provider Seabix AG offers its customers modular ICT with added value. Operational outsourcing unburdens businesses of all sizes, and they profit from a controlled environment with a great deal of know-how and experience. Owing to continuous development of the portfolio in cooperation with partners, and use of professional solutions, the investment remains future-proof.

At a glance

Customer

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3920 Zermatt
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Phone: +41 (0)27 / 966 86 86
E-Mail: zermatt@air-zermatt.ch
Web: www.air-zermatt.ch

Products and services:
Air mountain rescue; transport and tourist flights

Partner

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Requirements

> Central control and outsourcing of network management

> High reliability and failover reliability of the system

> Proactive remote monitoring and management in a crisis

> Increased data protection and compliance

> Improved Wi-Fi coverage for implementation of VoIP via WLAN, virtual LAN and Quality of Service

Components used

> 12x LANCOM LN-830acn AC WLAN access points
> 4x 48 LANCOM port switches
> LANCOM Management Cloud, managed by MSP Seabix AG

LANCOM Management Cloud

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