Europa Park - New network links for leisure world

Background – Europa-Park's infrastructure needs to deliver more and more

For over 35 years, Europa-Park in Rust, Germany has provided fun and excitement to millions of families. The leisure facilities, which cover an area of 850,000 m^2, include 13 European themed areas with more than 100 attractions and international shows. The park employs more than 3,000 people each season, and over 82 million visitors have come through its gates since it first opened.

Europa-Park's economic success is based upon its commitment to maintaining a high level of customer satisfaction by ever expanding and increasing the quality of its services. With new attractions being added to the park every year, the limitations of the existing network have become increasingly challenging. To accommodate this ongoing growth in facilities it has been necessary to install a new high-performance network.

The Challenge – a network that couldn't keep up

The management team of Europa-Park has to deal with enormous logistical challenges. Open every day for more than six months of the year, the park attracted more than 4 million visitors in 2009 alone. Managing the traffic-flow of so many visitors and ensuring their safety is a considerable technical challenge.

The existing network solution was unable to support the ever-increasing performance and safety requirements of the park. Network connections were too few and overloaded.

The wireless capability of the park's large conference centre was inadequate, and the central building control system was isolated from the main network.

The solution – a new network built for growth

D-Link and systems integrator Sautter Industrietechnik were appointed to create a new, more powerful and flexible network that integrates all park operations, and has the capacity to absorb any future growth in facilities. The change-over was completed in less than three months. The switches are distributed across the whole area in five physically separate FOC rings and cover different functions:

• Internal EDP network

• Public network and internet access

• Video and security technology

• Fire alarm systems

• Energy management, building management system, multimedia connections, event technology

The 12 network hubs can also be expanded as and when required. They were extended in such a way that existing structures could be connected to the various locations. Thanks to the high bandwidth of the new network infrastructure, it was possible to connect the key theme areas 'Iceland' and 'Greece'.

MP3 players provide suitable music in the different areas and the relevant audio data is input from the server via the network.

Benefits – looking after visitors and attractions

This delivers a host of benefits to the park's operations. The visitor counter installed at the entrance to the park enables visitor numbers to be determined in the waiting areas and quickly transmitted via the network to the logistics department to decide whether any changes need to be made to the number and cycle time of the rides.

Network-controlled buildings energy management provides more control and reduced power consumption. Surveillance cameras, installed for the safety of the park guests, now send their images via the network for recording and viewing in a central location. And the park's hotels and meeting rooms can now offer reliable radio frequency coverage and 24-hr wifi access via a professional wireless LAN, which can be managed centrally.