

## CASE STUDY

# ARS ELECTRONICA DEPLOY ARUBA WIRELESS SOLUTION TO ENSURE QUALITY INTERNET ACCESS FOR ALL VISITORS.



The Ars Electronica Festival has been showing its visitors the digital revolution and its impact on the future since 1979. The focus is on the connection between art, technology and society. The festival and associated symposia, exhibitions, and performances, held over a long weekend, have become one of the world's leading events for media art. Simple, uncomplicated and efficient access to the internet is part of the event's concept. The required infrastructure is deployed for only a short time, but must nonetheless be robust and efficient.



Karl Julian Schmidinger, Technical Director of the Ars Electronica Festival, sought a provider for a comprehensive coverage to ensure smooth Wi-Fi access for the 100,000 visitors of the specialist events at the Ars Electronica exhibition area in Linz for the duration of the festival – at a very large location.

“We were looking for a flexible, simple and open communication infrastructure,” Karl Julian Schmidinger explained.

### THE SPECIFICATION: COMPREHENSIVE WI-FI COVERAGE

The Ars Electronica organisers wanted to provide visitors with absolutely open Wi-Fi access throughout the festival, which worked smoothly even at peak times. The Wi-Fi network was

### REQUIREMENTS

- Integrated BYOD solution
- Full Wi-Fi coverage
- No password, completely open
- No captive portal
- Stable and fail-safe solutions
- Firewall

### SOLUTION

- Aruba Instant Access Points
- Flexible VLANs for Management & Visitors
- Access points and switches with management IP addresses in VLAN 1
- Aruba AirWave installed on PC with Hyper-V role in VLAN 1
- CCF firewall (pfSense) acts as router between the VLANs
- Aruba APs integrated in an Instant cluster
- Firewalls act as DHCP/DNS server
- 3 firewalls installed, 2 firewalls as DHCP
- Load sharing between the 2 Internet connections
- 2 x Aruba 7210 Mobility Controllers active cluster

### BENEFITS

- Optimal performance at peak times
- Open communication infrastructure for guests and partners
- Uncompromised & rapid connectivity
- Wide range of security features

“ Thanks to the generous supply of Aruba Wi-Fi infrastructure, we were able to provide large numbers of visitors with internet access despite the very spacious location. ”

**KARL JULIAN SCHMIDINGER**  
TECHNICAL DIRECTOR OF ARS ELECTRONICA

to also provide simple access to many collaborating partners, with devices as diverse as laptops, tablets or mobile phones; as expected from a BYOD setup.

Schmidinger quickly found the right partners in Aruba, a Hewlett Packard Enterprise company, and its installation partner Computer Center Feldbach: “Thanks to the generous supply of Aruba Wi-Fi infrastructure, we were able to provide

the great number of visitors with absolutely comprehensive internet access – at a very large location.”



### WI-FI PROJECT WITH PEAK LOADS

Over 100,000 visitors had attended the festival by its conclusion on Monday evening. The Ars Electronica Festival program consisted of more than 600 individual events, which were attended by 1,023 artists, scientists, organisers and contributors from 42 countries. Guided tours were held simultaneously in 11 languages ranging from Arabic to Russian and Romanian. Ars Electronica Linz GmbH had employed a total of 400 staff for the planning, organisation and execution of the festival.

“The BYOD solution had to work flawlessly with minimal effort, especially at peak times” says Schmidinger.

### THE DEPLOYMENT: PROJECT SUCCESS ACROSS THE BOARD

The framework for the five-day festival was defined once the controllerless Wi-Fi solution, Aruba Instant, was selected: “We wanted to offer Wi-Fi access without a password to our visitors and partners. It had to be completely open and without a

captive portal. Aruba provided the entire network security with various firewalls. That’s exactly how we imagined it: Simple but secure!” Schmidinger stated enthusiastically.

### THE OUTCOME: POSITIVE FEEDBACK FROM ALL SIDES

There was no time for a long trial period before the start of the festival. The Internet access had to work smoothly right from the start. And it did: The Wi-Fi network functioned continuously without any problems, despite having to serve as many as 1,000 clients and 180 simultaneous connections on each access point. Over 500 Gbytes of data were transferred by the Wi-Fi network during the 5 days.

“We received consistently positive feedback, not just from our guests, but also from our many partners. Users had stable Wi-Fi access at their disposal at all times,” Schmidinger reported.

### CONTINUOUS AVAILABILITY DESPITE HIGH CAPACITY UTILISATION

“We were pleased to have such a reliable mobility solution partner at our side throughout the festival, and are looking forward to continuing this fantastic cooperation next year,” Schmidinger stated.

The technical director of the Ars Electronica Festival sums it up: “The Wi-Fi just rocked!”

