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## ABOUT THE COMPANY

Amadeus Data Processing GmbH

[www.amadeus.com](http://www.amadeus.com)

## Amadeus relies on Console Servers and a Centralized Management Solution from Vertiv™

Constant availability and absolute reliability are critical for the computer reservation system, Amadeus. As the world's leading supplier of IT solutions for the travel industry, Amadeus Data Processing GmbH provides transaction processing power and technology solutions to travel providers and travel agencies. Data is gathered from numerous tourist service providers including some 724 airlines, 87,700 hotels, 25 car for hire companies and 103 railway and 50 cruise operators. To guarantee 24/7 availability, Amadeus controls its IT components remotely using technology from Vertiv. The remote management solution consists of the Avocent® DSView™ management software as well as ACS advanced console servers (ACS classic series and the ACS 6000 model), ensuring smooth IT operations from any location.

The Amadeus IT Group, with its headquarters in Madrid, provides information about prices and availability as well as online booking via a computer reservation system for package holidays, flights, hotels, cars for hire, ferries, cruise ships, railways and buses. The heart of the company is the data center, the 100% fully owned subsidiary Amadeus Data Processing GmbH in Erding (near Munich). It is connected to 75,000 travel agents and 11,057 sales agents for individual airlines worldwide. Boasting a 99.99% average uptime on central systems processing 1+ Billion transactions per day (peak) and a less than 0.3 seconds response time this data center operates on world class level.

### Case Summary

**Location:** Munich, Germany and Atlanta, USA as well as 20 smaller locations worldwide

**Vertiv Solutions:**

- DSView Management Software
- Avocent ACS Advanced Console Server

**Industry:** IT with main focus on tourism

**Key business:** Computer reservation system for tourism (more than 850 million transactions yearly)

**“The Avocent solution is convincing thanks to its high reliability and stability, thus offering optimum security. On top of this, it is very user-friendly and the price/performance ratio is right.”**

– Gunnar Eberlein, Network Administrator, Amadeus Data Processing GmbH

### Real-Time Information

To deal with such a large volume of data and guarantee a stable and smooth IT operation, it's necessary for each individual IT component to be controlled and managed directly. After all, connected travel agents and internet booking engines need to access up-to-the-minute information about all available service providers, to call up offers and to make bookings reliably. Furthermore, it has to be ensured that all customer and service data for bookings and for check-ins have been recorded and transmitted correctly. This is why breakdowns need to be recognized early and solved immediately without a loss of data or any safety leaks. Any new installation needed has to be carried out quickly and not interfere with the operations.

### Variable Port Number, Network Independence and Time Saving

These console servers from the ACS 6000 and ACS classic series have been providing secure, reliable and remote access for some time to serial management ports, which are available on IT network units such as routers, switches and firewalls.

Gunnar Eberlein, Network Administrator for Amadeus Data Processing GmbH explains, "We needed an efficient and centralized management solution, which made it possible for IT experts and NOC employees to have a secure, remote and out-of-band administration of the network components distributed worldwide."

The deciding factor in the use of Avocent® console servers from Vertiv™ was their highly variable port numbers, as Amadeus only needed 4-8 ports for the smaller locations, but 32 or 48 ports for the larger or central locations.

Eberlein realizes how beneficial the advanced console servers are, especially when upgrading the software for servers, routers and switches at faraway locations. This clearly saves time both for configuration and installation. A user-defined access level also ensures secure maintenance. On top of this, an optional integrable modem offers the greatest possible independence from the network connection. If this should break down, there is always the possibility to control the IT units through the phone line via the back-up modem.

### Centralised Administration Solution

From 1,200 network components company-wide, only 600 have been connected to the console servers so far.

"This large number of units made comprehensive administration software necessary, which is also why we decided to implement the Avocent DSView™ management software from Vertiv," says Eberlein.

With this solution, the network administrators can now securely and centrally access all administered units worldwide, run their diagnosis and carry out changes from Erding—irrespective of the condition or status of the end unit or of the network connection of these units. All components, whether they are switches, routers or firewalls from different manufacturers or even servers, blade centres, storage systems and PDUs can now be controlled and managed solely via the Avocent DSView management software. The browser-based software interface from the software serves as the central entry point for the maintenance of all IT components. The administrators can have easy access via out-of-band paths, diagnose sources of errors and, if necessary, re-boot the unit. Thus, offering consolidated and uniform access to remote management in real time to all interfaces and paving the way for troubleshooting from any location in case of a breakdown

### Cost Savings

Now Amadeus Data Processing GmbH can solve breakdowns remotely, quickly and effectively. And with a 24-hour service, it can also react immediately during the night, bringing additional cost savings. Previously, technicians had to be sent out to detect the cause of the breakdown, now travel time and costs can be reduced. Thanks to the secure Linux operating system, the console service delivers optimum performance with high security. The possibility of data logging supports a fast diagnosis of problems and compliance with important legal guidelines. This can also be used for automatic-error recognition and alarms, ensuring even faster solutions to problems

"The Avocent solution is convincing thanks to its high reliability and stability, thus offering optimum security. On top of this, it is very user-friendly and the price/performance ratio is right," summarizes Eberlein.

Three years ago there were 11 console servers in use, now there are 50, and the tendency is growing.

"More and more locations are being connected. We assume that this year more console servers for approximately 100 end units will be added to that," adds Eberlein.