CASE STUDY

Keeping AIDA Cruises' Ships Connected with *Smart* Out-of-Band™ Management

When guests step aboard an AIDA cruise ship, seamless connectivity is part of the experience. From internet access and onboard portals to cashless payments and entertainment, virtually every service depends on the network running behind the scenes. To ensure these systems stay online, AIDA Cruises relies on Opengear's *Smart* Out of Band management, keeping networks resilient, troubleshooting efficient, and guest services uninterrupted.

Always-on access: Opengear's *Smart* Out of Band solution enables technicians to manage shipboard network devices anytime, from anywhere.

Accelerated troubleshooting: Switch-related issues are now resolved 90% faster, dramatically improving network availability and minimizing impact on guest services.

Rapid ROI: The investment paid off in under nine months by eliminating the need for technicians to travel onboard for routine maintenance and updates.

The Challenge: Rapid Troubleshooting at Sea

On AIDA's eleven cruise ships, network connectivity is essential to daily operations. Guests access ship-wide Wi-Fi, on-demand entertainment, and mobile services. At the same time, thousands of critical onboard systems—including payment terminals, access controls, surveillance, and communication devices—rely on the network to function.

To give a sense of scale: even AIDAdiva, the smallest ship in the fleet, supports nearly **16,000 operational IP devices**, plus personal devices used by more than 2,000 passengers and 600 crew members.

Each ship's network infrastructure is extensive and complex. AIDAdiva alone includes **150 kilometers of cabling**, over **700 access points**, and more than 800 switches, interconnected across six fire compartments and two onboard data centers. Managing this requires robust architecture and constant oversight.

While a small onboard IT crew handles day-to-day network operations, more complex issues historically required support from onshore experts. When remote access was unavailable, teams sometimes relied on manual workarounds, such as console access via shared laptops, or even phone-based troubleshooting. These approaches extended resolution time and had the potential to affect the guest experience.

Routine maintenance also contributed to operational costs, as technicians sometimes required traveling onboard for device replacements or firmware updates, incurring travel expenses and utilizing passenger cabins.

The Solution: A Dedicated Maintenance Network

To overcome these challenges, AIDA Cruises deployed Opengear's *Smart* Out of Band management across its fleet—providing reliable, remote access to shipboard networks at all times.

Central to the solution is Opengear's Lighthouse® platform, which offers:

- Unified visibility across all Opengear devices
- Streamlined provisioning and configuration
- Resilient remote access, even during primary network outages
- On-premises deployment for greater control and cost savings

"Lighthouse was the decisive argument for us in favor of Opengear," explains Diogo Almeida, Head of Network, Connectivity & Infrastructure at AIDA Cruises. "There are many console servers out there, but Opengear stands out with its convenient centralized management in Lighthouse. In addition, Lighthouse is not cloud-based, so we can operate the platform in our data centers, which gives us independence and saves costs."

The deployment, completed within nine months, equipped:

- Data centers with **OM2200** console servers (16 serial ports)
- Distribution rooms with **OM1200** models (4 serial + 4 Ethernet ports)

Opengear and premier partner SVA supported the rollout, though installation proved simple enough for AIDA's onboard IT crew to handle independently. Devices auto-configure from flash drives, minimizing setup time.

"The support from Opengear and SVA was excellent," reports Almeida, "although admittedly not much support was required as the installation of the devices is simple." The IT crew performed installation onboard with ease, resolving an initial latency issue on AIDAluna in partnership with Opengear and SVA.

The Results: Greater Uptime, Lower Costs

Today, Opengear provides reliable remote access to **over 64,000 network devices** across AIDA's fleet—even if a ship's primary network is offline. Troubleshooting that once required laborious, error-prone processes now happens swiftly and efficiently.

"Console access via out-of-band management is our insurance that we can access all network devices remotely at any time. We have access from anywhere in the world and regardless of where a ship is located," Almeida says.

Routine tasks like device setup and firmware updates are now handled remotely, eliminating the need to send technicians onboard. Updates can proceed with less risk, thanks to console access for rollback and recovery. As a result, third-party service contracts are no longer needed for routine updates—saving costs and freeing passenger cabins once reserved for visiting technicians.

"Basically, the Opengear devices paid for themselves in nine months. Once we had equipped all eleven ships with them, we were able to update the network devices remotely and no longer had to hire a service provider. This not only saves money, but also frees up a cabin on board for a paying guest," Almeida explains.

A Platform for the Future

Encouraged by the results at sea, AIDA Cruises is now extending its use of Opengear to:

- Onshore data centers
- Containerized dry-dock data centers
- New cruise ships under construction—planned with even more advanced Opengear models to support future growth.

"In this way, we can further minimize the impact of reboots. After all, almost everything on board depends on the network and it is important for us to increase its availability—one of the keys to this is *smart* out-of-band management with Opengear," Almeida concludes.

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PORTRAIT OF AIDA CRUISES

AIDA Cruises is the German market leader for cruises and the third largest German tour operator. The company's fleet, which currently comprises eleven ships, is one of the most modern and innovative in the world—both in terms of the design of the spaces on board as well as the technology and operating processes. With two newbuilds scheduled to enter service in spring 2030 and winter 2031/2032, the company aims to set new standards in the cruise business. This also includes the use of multi-fuel propulsion systems that can be operated with LNG and, in the future, with biofuels and e-fuels.

As part of the fleet modernization programme known as AIDA Evolution, AIDA Cruises is also comprehensively renewing all seven AIDAselection ships. This began with the AIDAdiva in February and March 2025, followed by the AIDAluna in the fall of 2025 and the AIDAbella at the beginning of 2026. The aim is to take service and comfort on board to the next level, which will also involve modernizing the network infrastructure.

AIDA Cruises is a subsidiary of Carnival Corporation, the world's largest cruise company, and employs 18,000 people from 60 countries—around 1,200 of them at its headquarters in Rostock.

THE PROJECT AT A GLANCE

Client: AIDA Cruises

Industry: Tourism

Goal: Introduction of *Smart* Out of Band management on eleven cruise ships and in several data centers on land for remote troubleshooting, remote configurations and remote updates

Solutions:

- 152 Opengear OM1200 Operations Managers
- 26 OM2200 Operations Managers
- 2 Opengear IM7200 Infrastructure Managers
- 50 Lighthouse Nodes