



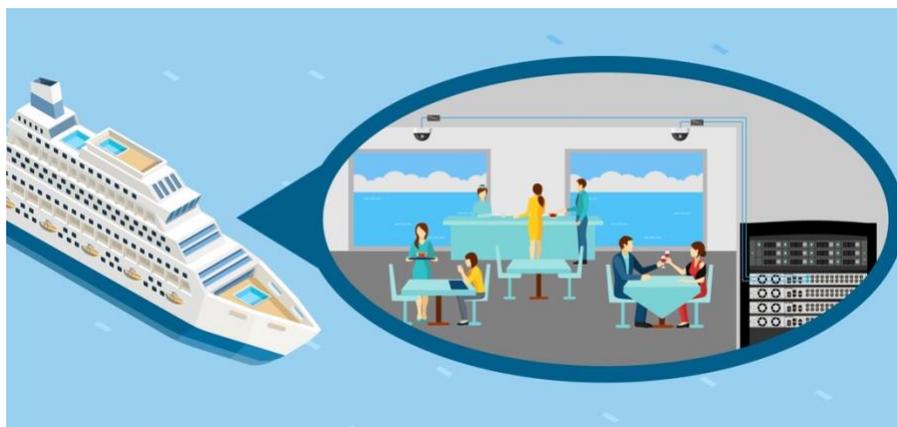
## **Large Cruise Line Uses NVT Phybridge Ethernet over Coax Technology to Deploy IP Surveillance across Eight of Its Cruise Ships**

The Cruise Line Company has been a leader in the cruise industry for over 50 years. Today, guests travel the world while enjoying unparalleled amenities aboard its award-winning vessels. While at sea, guests can enjoy a unique and memorable dining experience at one of the many specialty restaurants on board, and watch world-class musical performances, shows, and other entertainment straight from Broadway. The organization strives to provide the most innovative and accommodating vacation experience for guests while traveling to the most beautiful and exotic locations around the world, including Hawaii, the Caribbean, Bermuda, Europe, Australia, Alaska and more.

However, the Cruise Line was still relying on analog surveillance equipment throughout many of its cruise ships and was interested in modernizing to IP to provide the safest travel experience for guests. The organization was interested in an IP-based system as it would provide high-resolution viewing and recording capabilities, improved monitoring, and better application management. The existing analog cameras were supported by a Coax-based infrastructure that ran throughout the ships. The organization considered removing the existing Coax and installing Ethernet cabling to support the new IP cameras, but became concerned with the high costs, long deployment times, and environmental impact. Unsatisfied with traditional network design philosophies, the organization looked for an innovative solution.

### **Environmental Responsibility**

The Cruise Line is committed to being a responsible corporate citizen by preserving the precious natural resources that are integral to its success. The organization strives to minimize waste, reduce CO2 emissions, and engage in impactful environmental partnerships. Every ship has a team responsible for the implementation, training, and oversight of shipboard environmental compliance. Additionally, all crew members receive specialized environmental training and are responsible for ensuring environmental compliance in everything they do. As the organization planned its modernization to IP surveillance, environmental responsibility was also top-of-mind.



## Modern LAN Design

Given the customer's digital transformational objectives, the reseller partner, Surveillance International Inc., recommended [Modern LAN design](#) and the [NVT Phybridge CLEER](#) (Ethernet over Coax) solution. The CLEER switch, with [SmartPathPoE technology](#), transforms any new or existing Coax-based infrastructure into a robust IP backbone ideal to support any IP camera, with reach capabilities up to 6,000ft (1,830m) – 18-times farther than a standard Ethernet switch.

The customer was impressed with the proposed solution and decided to move forward with the digital transformation. After a few simple setup steps, the CLEER24 switch transformed the existing and proven Coax infrastructure into a robust and reliable PoE backbone; capable of supporting the new IP cameras in all areas of the ship. Additionally, the organization could now connect up to 4 IP cameras using a single Coax cable run using the NVT Phybridge EC4 Adapter.

After successfully deploying IP surveillance throughout the first ship, the organization decided to replicate the success in several of its other liners. Thanks to Modern LAN design and the NVT Phybridge CLEER24 innovation, the customer was able to simplify the digital transformation and increase the number of cameras on board its ships, which can carry a combined total of more than 19,000 travelers every voyage. The Ethernet over Coax solution allowed the customer to leverage its existing infrastructure to avoid the risky and complex rip & replace upgrade model.

## Change the Conversation; Improve the Outcome

The Cruise Line took a proactive approach to find new and better ways to support its digital transformation objectives in a financially and socially responsible manner. NVT Phybridge helped the organization change the conversation around traditional LAN design; leveraging Modern LAN Principles and PoE innovations to:

- Deploy over 4,000 IP cameras across eight cruise ships using the existing Coax-based infrastructure
- Increase the number of IP cameras in all public areas using the EC4 Adapter
- Reduce infrastructure costs by more than \$4 million while simplifying and accelerating the project to improve return on investment
- Ensure the purpose-driven network for surveillance was maintained and enhanced
- Support IP cameras exactly where they were needed thanks to the CLEER24's long reach capabilities
- Prevent over 120 tons of cabling e-waste from entering a landfill
- Additionally, the Cruise Line can now support additional devices using the new IP-enabled local area network, including IP phones, IP speakers, and wireless access points