Christie Phoenix, enabling efficiency

Case Study

▲ American Water's Operations Security Support Center display wall.

Christie Phoenix enables IP-based digital control rooms

Serving over 14 million people, American Water is a leading provider of high-quality water and waste-water services in the United States and parts of Canada. American Water's primary responsibility is providing safe, clean water for their customers, as well as being committed to environmentally responsible operations. It's their priority to be aware of, and respond as quickly as possible to, incidents that arise in any of their geographically dispersed locations.

Two years ago, American Water saw a need to transform how they monitor and manage security of their facilities to reduce the cost and improve the effectiveness of security monitoring today, and in the future. Their goals were to insource security monitoring and build a monitoring center that leveraged existing internal systems. Within the control room, they needed a digital wall to display feeds and layouts that could be easily integrated, customized, recalled and shared - from multiple locations and multiple sources - with high accuracy and reliability.

Nicholas Santillo Jr., CPP, PSP, Director of Operations Security for American Water, shared American Water's objectives for the control center, "Our ability to act quickly, respond to alarms, ensure our employees' safety, protect our facilities and provide holistic situational awareness, to both our local operations and our executive leadership teams, is critical in delivering value to our customers and operations. The Christie® Phoenix™ is key to meeting those objectives."

Simple, modular, scalable

The wall needed to display both physical and digital feeds from live video, desktop captures, online information, local cable television feeds and facility systems. The system also needed to be easy to learn and use to minimize training time for staff. Beyond the day-to-day use, American Water needed a solution that would be modular and scalable to adapt to the changing needs of their business over time.

"When we compared the Christie Phoenix solution to other products on the market, it had 24/7 system reliability, which was very important. Other vendors' complex solutions with multiple servers and switchers would mean more potential points of failure throughout the system and higher costs. Christie Phoenix is a simple design and single-SKU solution which made it very attractive to us."

Nicholas Santillo Jr., CPP, PSP
Director of Operations Security
American Water

Customer:
American Water

Location:
NJ, USA

Industry/Market:
Power and utilities
Security

Partners:
ClassCraft Audio Video

Requirements:
- Low total cost of ownership
- Energy efficient
- 24/7 operations
- IP-based solution
- Integration of multiple physical and digital sources
- Flexibility to customize and recall layouts
- Reliability of system and delivering to specifications
- Scalable
- Easy to learn, use and train new staff

Summary:
Christie Phoenix brings simplicity and mobility to the complex world of control rooms with an integrated IP-based solution. The American Water Operations Security Support Center installation was a first for this U.S. public utility, and it was also the first installation for Christie using the new Phoenix nodes and software.

Products:
- 12 Christie Phoenix nodes
- 21 Christie FHD551-X

Results:
Through the partnership between Christie and ClassCraft Audio Video, a highly functional and adaptive security monitoring center with a low total cost of ownership was built for American Water. The center will offer enhanced safety and situational awareness – delivering efficiencies and synergies within American Water's security monitoring operations.

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Seamless design, superb execution

To ensure American Water selected the system that met their design requirements, they engaged and worked closely with ClassCraft Audio Video to help them evaluate, based on a criteria, different vendors that provided similar solutions.

One of the evaluation criteria was whether or not a product lived up to its spec sheet during demonstrations. Christie Phoenix impressed American Water and ClassCraft Audio Video by working seamlessly in its temporary demonstration setup, imparting confidence that it would be consistently reliable and easy to use and maintain in a permanent installation.

Once Christie Phoenix was chosen, the design was implemented at American Water's NJ based location. Space challenges were overcome by using Christie flat panels that feature a narrow bezel and deliver space and energy efficiency. The Christie Phoenix nodes themselves are compact in design and very space efficient, fitting the entire system in a single rack. The nodes easily aggregate the physical and digital feeds that American Water required — including audio — without the customer needing to purchase separate parts.

The setup was further supported and optimized using Ortronics racks to store the Phoenix nodes. The facility features Berk-Tek certified fiber optic and CAT-6 cabling used throughout, backed by a 25-year system warranty, giving American Water additional confidence in the reliability and support for the life of their control center.

Aligned with American Water's green philosophy, they minimized the need for air conditioning by using LED lighting and housing only operators, monitors and the wall within the control room, with the server room taking the full heat load. The wall was also set up so that the panels can be toggled on and off to extend their life and further minimize electricity usage.

The wall worked so well that Michael Class, owner of ClassCraft Audio Video, commented about the quality of the video feed display, "It's difficult to find video gear to drive that type of product and actually have the syncing work without issue – we achieved this using the Christie displays and Phoenix system."

Depending on how the needs of the client change over time, the wall can also be scaled by adding display units and nodes. "This product is consistent and simple to deploy, in my opinion, compared to other products that are out on the market – it's something a buyer can understand," says Class. "With the competitors' products, we had to buy special encoders for certain aspects of it. Christie did a great job of including it all in one box and making it scalable."
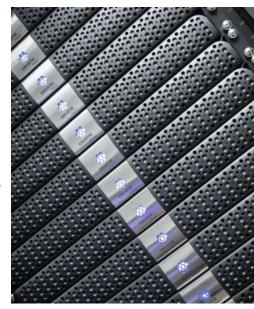
Not only did this installation make a lasting impression on both American Water and ClassCraft Audio Video, Christie's commitment to service was also a major factor, ensuring a smooth deployment. Christie engineers responded quickly and comprehensively to questions, supporting the installation.

Shortly after American Water's control room came on line, there were reports of flooding in the mid-western states. The Operations Security Support Center was able to monitor the flooding and quickly create layouts of stream gauges, video cameras and local media reports, providing a high level of situational awareness to support their operations teams as needed. As Santillo states: "Christie Phoenix enabled us to quickly aggregate and display information – saving time."

Embracing forward-looking trends and using Christie Phoenix's network-distributed, IP-based solution, American Water has developed a model for digital public utility control rooms.

Contact Christie
Contact us today to find out how your organization can benefit from Christie solutions.

▲ 12 Christie Phoenix nodes provide a compact and simple solution for integrating digital feeds, including audio.

▲ Visual quality and color consistency together with space and energy efficiency.

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