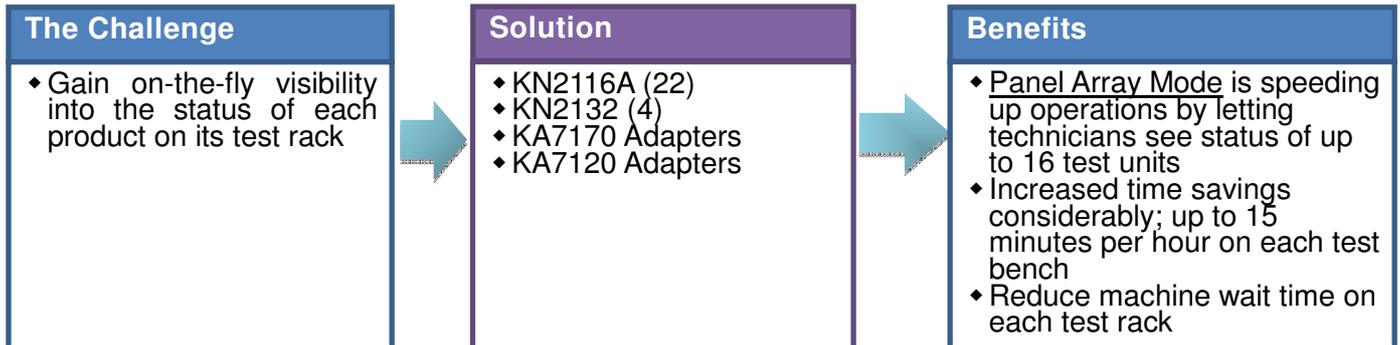


Arrow Electronics Automates its Product Test Center Operations with ATEN's Panel Array Mode Functionality



Customer: Arrow Electronics (www.arrow.com)

Arrow Electronics is a global provider of products, services and solutions to industrial and commercial users of electronic components and enterprise computing solutions. Headquartered in Melville, N.Y., Arrow serves as a supply channel partner for more than 900 suppliers and 125,000 original equipment manufacturers (OEM), contract manufacturers and commercial customers through a global network of more than 310 locations in 51 countries and territories.



↙ The Challenge



As a leading supplier of computer products, Arrow is deeply embedded in the ever-changing face of current technology. The company's Phoenix facility functions as a distribution center with 60,000 square feet of space supporting Arrow's OEM computing solutions. Arrow exists to satisfy the hardware and software needs created by the evolution of technology in the industry. The company is constantly looking to increase capacity and reduce wastes in all of its computer manufacturing processes.

At the Arrow North American Components Center in Phoenix, Hank Eyring, engineering supervisor at Arrow, is responsible for NPI (New Product Introduction). At the center, Mr. Eyring manages eight of the 17 full-time engineers on staff. These engineers are tasked with managing Arrow's sophisticated integration and testing racks. "All racks must have the ability to operate, configure and test every available computer and software platform," he said.

Arrow assembles a range of electronic products (servers, storage, IP appliances, etc.) to specification for its clients. After the build phase, Arrow must then rigorously test each product before it is shipped out. According to Eyring, getting the devices through the configuration process was a time drain. "Prior to deploying ATEN products, our test rack solution consisted of an older analog KVM switch which limited our ability to maintain constant awareness and visibility of each unit under testing."

For example, when Arrow had a problem with a device, they could not see it unless they physically moved the KVM (keyboard/video/mouse) switch to that specific unit. This was also the case when a device was finished with the testing. There was no visibility for the current status of that test bench with its targets. "Suffice to say, the process was extremely time-consuming and tedious," Eyring said.

↙ Solution

Eyring and his team began the search for a KVM switch that could display on one single monitor the current status of all units being tested on the rack. A KVM (Keyboard/Video/Mouse) switch is a hardware-based solution used to access and control multiple computers, servers and peripherals conveniently from a single console.

After an exhaustive search, they short-listed ATEN's KN2116A, a 16-port IP KVM switch that offered a key feature called Panel Array Mode which allows users to selectively monitor attached servers simultaneously in a grid array. By clicking on one of the images, it instantly brings that server or computer to focus for further review. "ATEN's Panel Array Mode was the feature that drew us to select their KVM switches," he said.

The successful trial of the products as well as time savings observations led to the company's decision to purchase and begin rolling out 22 KN2116A KVM Switches and 352 adapters (KA7170A and KA7120). The ability and time savings realized by the Panel Array Mode to provide status of all 16 units under testing was the factor that Arrow needed most. "The added ability to offer our engineering support personnel remote access into the KVM to perform troubleshooting on a UUT (Unit Under Test) without interrupting the technician at the local console solidified our decision," Eyring said.



16-Port, 3-User IP KVM
KN2116A



32-Port, 3-User IP KVM
KN2132



USB & VGA CPU Adapter
KA7170



PS/2 & VGA CPU Adapter
KA7120

Benefits

The new test racks that have been deployed to the floor are quickly becoming the racks of choice for Arrow's test technicians, noted Eyring. The technicians are reaping the benefits of having the new ability of seeing constant status of all units on the rack. "We are enjoying the benefits of ATEN's Panel Array Mode which enables us to see constant status of all test units on the rack – clearly displayed on a 24" LCD monitor," he said.

Arrow's ability to reduce machine wait time on each test rack is the most important feature of the ATEN products. Previously, Arrow had 16 units on any given rack that could at any time be awaiting user input. Now, the company has a visible method of addressing machine wait times and status immediately. In terms of ROI, Eyring determined that the ATEN products helped his team save more than 15 minutes per hour on each test bench – well exceeding the company's expectations. "This saves us 12 hours each day between two shifts which translates into more product being configured and tested in less time," said Eyring. On the topic of support, Arrow was pleased with the level of service it received from ATEN. "Answers to our KVM configuration questions in this unique environment were, and continue to be, very helpful and prompt," he said.



"With the ATEN products, we are enjoying the benefits of the Panel Array Mode which enables us to see constant status of all test units on the rack."

-- Hank Eyring, engineering supervisor at Arrow

Future

"As our employees have become more educated on the technology, we are realizing significant savings in terms of efficiency. Looking ahead, we are certainly interested in equipping our integration center with additional ATEN equipment as our operations focus on lean, efficient processes and increased complexity."