

Success Stories



Nuclear Energy Provider

Paragon KVM helps Exelon control access to sensitive plant data

Challenges

Headquartered in Downer's Grove, Illinois, Exelon Nuclear operates the largest network of nuclear power stations in the U.S. and the third largest in the world. Exelon's 10 power stations - with a total of 17 reactors - represent approximately 20 percent of the U.S. nuclear industry's power capacity. The Exelon Nuclear Mid-Atlantic Regional Operating Group (ROG), located in Kennett Square, Pennsylvania, provides governance, oversight and support to four nuclear generating stations, which house six operating nuclear reactors located in Pennsylvania and New Jersey.



According to Doug McGinnis, Manager of Infrastructure Services for Exelon, "The proliferation of server-hosted applications has placed an increased reliance on the network infrastructure, particularly for keeping records secure. We are storing more data than ever before, especially millions of paper drawings, making information security a big piece of the puzzle. It is imperative for us to keep the number of users to a minimum in terms of server access."



McGinnis' IT shop was forced to deploy more servers to support an increasingly complex and mission-critical network infrastructure. To simplify and centralize control of these servers, McGinnis initially opted for off-the-shelf KVM products. These solutions, however, proved to be unreliable and incompatible with the various hardware platforms in the data center. They also failed to provide the remote KVM access McGinnis needed.

The Solution

McGinnis found his answer in Raritan's award-winning Paragon® Cat5 KVM (Keyboard, Video, Mouse) switch and IP-Reach® remote access gateway. "We reviewed all the options and determined that Raritan was one of the few vendors who could provide a complete solution that could handle our data center and its disparate technologies," he said. "Plus, having remote access to the console provided the flexibility and security to work on our boxes using an out-of-band connection for BIOS-level control."

Since September 2002, Paragon has played an important role in managing Exelon's Kennett Square data center - a site consisting of 20 Wintel servers, two UNIX® servers and one Sun® server. "We looked at competing products, but Raritan was the most cost-effective for a data center of our size," said McGinnis, who has experienced no performance issues with the Raritan solution. "We love the security levels offered by Paragon and IP-Reach, especially the 128-bit SSL encryption and RADIUS-enabled authentication."

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"With the Raritan solutions, we can configure user groups and different levels of administration beyond the security built into the server itself," McGinnis added. "Previously, anyone could pull up a console connection to any server in the data center. Now, there are two levels of authorization before gaining access."

The Results

McGinnis has seen significant savings in manpower and overhead for server management. "We can't have administrators on duty 24/7, but the Raritan solution brings us as close to providing that level of network support as possible. We have seen substantial increases in productivity, while easing the burdens on our limited IT staff," said McGinnis. "I can sit at my desk and do configuration changes on the fly as if I were in front of the box."

He can also put out fires from his living room. One Sunday afternoon, McGinnis tried in vain to access and re-boot one of his Windows 2000 servers, using Windows Terminal Services. After getting no response, he was able to quickly access the Paragon KVM switch, using his browser, through the IP-Reach gateway. Paragon's BIOS-level KVM access allowed him to step through the boot process. So when he received a bad boot device error message, indicating that a floppy disk was left in the server drive, McGinnis was able to remotely reconfigure the BIOS to bypass the floppy drive in the boot sequence and bring the server back up to full operation - all without leaving his home.



The Future

McGinnis saw this initial engagement with Raritan as a pilot program and intends to roll out the Paragon and IP-Reach products to 11 other Exelon nuclear data centers. "The ability to have administrative access throughout our entire organization will help us immensely by maximizing productivity and enabling us to troubleshoot any IT issues remotely."

Raritan, Inc. is a leading supplier of solutions for managing IT infrastructure equipment and the mission-critical applications and services that run on it. Raritan was founded in 1985, and since then has been making products that are used to manage IT infrastructures at more than 75,000 network data centers, computer test labs and multi-workstation environments around the world. From the small business to the enterprise, Raritan's complete line of compatible and scalable IT management solutions offers IT professionals the most reliable, flexible and secure in-band and out-of-band solutions to manage data center equipment applications and services, while improving operational productivity. More information on the company is available at Raritan.com.

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