

Case Study

Raritan Solution Bolsters Efficiency at Morgan Keegan Branch Offices

There is no room for downtime at premier investment firm Morgan Keegan & Company. Individual investors, corporate and institutional clients rely on the nationally recognized firm to deliver a full range of investment banking, securities brokerage, wealth and asset management services across the U.S.

To maintain its reputation for quality research and timely financial advice, Morgan Keegan analysts and brokers must have round-the-clock access to data, from external news and market feeds, and to internal financial and customer management systems. And, they need lightning-fast connectivity whether they're next door to one of Morgan Keegan's two data centers, or hundreds of miles away in one of the firm's 400 branch offices.

Raritan products have been helping the firm deliver high levels of uptime in their two data centers. However, supporting their remote branch office sites was becoming a larger task.

Based on the stellar performance of Raritan's remote management products in its data centers, Morgan Keegan chose Raritan's new Dominion® KSX II, its next-generation appliance that delivers secure always-available access to the diverse IT equipment located at branch offices. Not only would the Dominion KSX II sharply reduce the time required resolving support issues, it would enable the existing Morgan Keegan IT staff to handle the newly added branch offices.

Maintaining Visibility

More than 3,200 Morgan Keegan employees in 19 states rely on its data centers and network infrastructure to operate efficiently. The firm's 118 IT employees operate two data centers in Tennessee: one, a primary hot site; and the other, a business continuity site — where the staff of about 20 are ready to assume operations should the first site experience a downtime event.

To monitor every piece of equipment at those data centers, Morgan Keegan uses Raritan's CommandCenter® Secure Gateway, which provides an aggregated view of all IT equipment connected to Raritan KVM-over-IP switches on a single screen. The Secure Gateway — conveniently accessed from anywhere, using one IP address — also provides user authentication, and enables IT administrators to initiate access to target servers through the most appropriate means, including KVM over IP, serial console, DRAC 4, and iLO/iLO2.

Integrated with CommandCenter Secure Gateway are Raritan's 64-port Dominion KX and Dominion KX II KVM-over-IP switches, which provide multiple concurrent users with secure, BIOS-level control of servers and other IT devices from a single keyboard/video/mouse console.

"With a simple click of an icon on the screen, we can access any server no matter where it is located," says Don Meyers, Senior Vice President, Corporate Information Security & Core Services Manager at Morgan Keegan & Co., Inc., who leads both the IT and physical security

Customer	With more than 3,200 employees, Investment Firm Morgan Keegan serves the diverse financial needs of individual investors, corporate and institutional clients.
Challenges	The company needed a more responsive way to manage its more than 400 branch offices in the U.S. The IT department wanted a solution that would provide reliable and secure access to branch office servers anytime.
Solution	The customer selected to place in each of its branch offices a Raritan Dominion KSX2-188 — which provides 8 KVM ports, 8 serial ports and 2 power control ports. The decision was based on the following criteria: <ul style="list-style-type: none">• Always-available access• Security• Remote power management• Ability to fix patches with Virtual Media• Works with Morgan Keegan's existing KVM-over-IP maintenance network used in managing its two data centers
Results	With the remote access to branch office IT equipment made possible by Dominion KSX II, Morgan Keegan's IT department has: <ul style="list-style-type: none">• Reduced travel to branch offices• Increased productivity• Reduced mean-time-to-repair• Performed regularly scheduled weekend maintenance tasks on branch office equipment from the convenience of their homes

departments for the firm. "Our authentication, through CommandCenter Gateway, enables my staff to quickly get to the servers that they are assigned to administer."

Remote Support Challenges

But Morgan Keegan was experiencing issues in supporting far-flung branches. Ninety of those offices operate a large range of IT equipment, including at least two servers, a Reuters server for financial feeds, recording PCs for phone logs, and PBX or IP phone systems, as well as desktops.

When a branch office experienced a performance event, Morgan Keegan had addressed the issue via a remote software support solution. But, that had proved time-consuming and problematic.



"Sometimes if we tried a reboot and the system would hang, we would call the branch and have to have the office manager go in and perform or initiate a hard reset," says Meyers. In addition, consuming network bandwidth to perform support "could cause a slower response time across the WAN," he adds. "It could degrade performance, and the Morgan Keegan client would see that it was taking longer than usual to get information."

The IT staff also had to limit server maintenance and reboots to times when a resource was available in the office to physically reset systems in the event of a problem. Plus, the server's operating system had to be running in order for the remote software solution to work. If the OS had crashed after hours there was no way to access the server — short of traveling to the branch office.

Dominion KSX II Speeds Time to Resolution

To resolve these issues, Morgan Keegan chose Raritan's Dominion KSX II, a hybrid of KVM over IP, serial console over IP and power management over IP. The Dominion KSX II integrates these key remote management and control technologies in a single appliance, so that any piece of IT equipment — including servers, switches, routers and PBXs — can be fixed virtually.

Raritan's successful track record had already won Morgan Keegan's allegiance. "We had been using Raritan products for more than five years," Meyers says. "We chose the Raritan KSX II for our branch offices, because the Raritan equipment in our data center operations has proven itself every day. We also liked the idea of starting out on day one with an integrated system using our existing CommandCenter Secure Gateway, instead of having two different systems." As each branch office is equipped with a KSX II, the appliance and all the attached equipment will immediately appear on the CommandCenter Secure Gateway screen.

Full BIOS-level and keyboard/mouse control, as well as power cycling control, of remote equipment allows IT staff to perform maintenance and support of remote offices without degrading network performance or relying on local, non-technical employees for assistance.

Since the KSX II operates out-of-band, Morgan Keegan can access troubled equipment even if the network is down or the operating system is frozen or crashes and the server cannot be accessed. Advanced security features, including 256-bit Advanced Encryption Standard (AES) encryption of keyboard, video and mouse data, strong password support, failed login lockout support, and built-in authentication capabilities, ensure Morgan Keegan's sensitive financial data remains secure.

Through a single Web-based logon, the IT team can view in real time all the IT equipment at each branch location, as well as access, monitor, troubleshoot, repair and reboot the equipment. If used with Raritan's intelligent PDU, the Dominion PX, the power can be recycled when necessary. This saves travel time and costs and, of course, improves performance at the branch office.

With Virtual Media, IT administrators can conveniently transfer data to remote servers using their own local storage media (CD/DVD/USB drive/Hard drive) through a KVM-over-IP connection. This is ideal for installing software, upgrades and bug fixes.

"With the Dominion KSX II's always-available out-of-band connectivity, it allows us to not worry so much about maintenance on the weekend and having someone there to touch the reset button," says Meyers. "It's nice to know we'll be able to get the system up and running before employees come to work in the morning.

"We reboot 25 percent of our servers once a week," adds Meyers. "Before, we may have done that in smaller quantities. Now we can do larger numbers because we know we'll have access to them no matter what." When hard drives need to be replaced, the solution's Virtual Media capability means IT can reinstall the image onto the new drive remotely.

Morgan Keegan has installed the KSX II in about a third of its 90 larger branches so far, with the remaining installs occurring at a 20- to 30-per-year rate as branches are opened or moved.

With the KSX IIs in place, "We can provide better support, and be less intrusive," says Meyers, allowing IT to focus its time and resources elsewhere, and Morgan Keegan financial experts to focus on the business at hand. "It works like it's supposed to, and that's what counts."

Call 1.800.724.8090 or visit Raritan.com

Raritan is a leading provider of secure IT infrastructure management solutions that provide IT directors, managers and administrators the control they need to optimize data center productivity, enhance branch office operations and increase overall power management efficiency. In over 50,000 locations around the world, our integrated secure in-band and out-of-band server access, control and power management products help companies better monitor and manage server access, utilization and energy consumption. Raritan's OEM division provides advanced embedded hardware and firmware for server and client management, including KVM over IP, IPMI, intelligent power management and other industry standards-based management applications.

Based in Somerset, N.J., Raritan has 38 offices worldwide, serving 76 countries. For more information, please visit Raritan.com

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