

Success Stories



Paragon KVM Drives Data Center Efficiencies for Subaru System Service

Description of Company

Subaru System Service Co., Ltd. (SSS) was established in 1995 as a spin-off of the IT System Department of Fuji Heavy Industries, Ltd., known around the world as Japanese auto maker Subaru.

Today, SSS's Service Engineering Section alone manages over 300 servers running various platforms at three sites in Japan: in Gunma, Omiya and Shinjuku.



KVM drawers typically have much fewer ports than analog matrix switches, and therefore require more rack space and have a higher cost per port; Subaru had one in every rack. And because this KVM solution required local access, it also required local staffing, where centralized, off-site expertise using remote access might have been much more cost effective.

Managing Security, Efficiency, Growth

The deployment of Paragon Cat5 KVM switches answered many of SSS's security, efficiency and cost concerns. Paragon I switches were first deployed in the Gunma office in June 2003.

Challenges

Up until 2004, SSS managed its servers using KVM drawers that were installed at every rack. This solution left much to be desired in terms of security, system efficiency, convenience and cost. As part of Subaru's efforts to align system management along the guidelines of ITIL (IT Infrastructure Library, a best-practice standard for IT service management developed in the UK), SSS undertook to find a better KVM solution.

In the first place, system administrators had to leave their desks, walk all the way down to the data center, pass through a security checkpoint, and stand at each rack in order to manage any of the servers mounted in that rack. This was not only a major inconvenience, but also took up a lot of valuable admin time.

Secondly, whenever a server was moved from one rack to another, the server had to be brought down and the KVM switches in each rack had to be reconfigured to accommodate the server change, adding to staff time required to make the move and creating yet another inconvenience and opportunity for human error.



Paragon's Cat5 technology, with its secure 1000-foot reach, allowed SSS to operate its Gunma server room in a "lights-out" mode, letting administrators manage servers from user stations at their desks outside of the data center. Says Ryuji Ishiguro, of Subaru's Service Engineering Section: "Keeping people physically out (by only allowing remote access) is as important as software security tools in keeping the server room secure."

Paragon's tiering ability and its high port density enabled Subaru's administrators to access and control several racks of servers from one switch, in a non-blocking architecture that let any admin access any server. This, in turn, allowed Subaru to stop buying and installing KVM switches for every new rack of servers, and lowered the price per rack 89 per cent, from 400,000 to 43,500 yen (\$4,000 to \$435 in U.S. dollars).

Success Stories - Subaru System Service Co., Ltd.

Productivity

Moving servers from switch to switch now takes up much less time at SSS, since Raritan's CIMs (Computer Interface Modules) hold the servers' ID information and automatically download it to the KVM switch when connected. Raritan's keyboard, video and mouse emulation technology, built into each CIM, also make it possible for SSS to change keyboard/mouse and cabling connections without bringing down a server, "Very convenient and helpful for server maintenance," says Ishiguro.

Based on the Paragon's performance at the Gunma office, SSS decided in April 2004 to deploy Paragon II switches for its large server room in Omiya, Saitama Prefecture, making it the first Paragon II site in Japan.

Yuki Hoshino, system administrator in the Omiya data center, notes that his backup tasks, too, have been streamlined by desktop access outside the server room. Before the Paragon II installation, he had to back up every server locally through the KVM drawer at each rack, and repeatedly check the progress of each rack. "After Paragon II, we simply check the status of server backup from outside the server room, and go inside only once to collect media after all the backup procedures are finished for all of the servers. We save several hours a day."

Managing Growth

"Hoshino also notes how the Paragon II's CIM modules make it possible to attach servers of any platform to any Paragon II KVM switch, an important factor where Windows NT, Windows 2000, HP UX, Solaris, AIX and Red Hat Linux servers all occupy the same data center. "When we need to add new servers, we don't have to care about connectivity with particular switches. Also, the Paragon II's smaller CIM and use of standard Cat5 cable made it much easier to install the cable inside the rack. One of Raritan's resellers was very helpful, working with us to adjust the cable lengths to our needs."

Ishiguro's staff at operations group is now looking to deploy Raritan's IP-Reach gateway, which will allow administrators at home or on the road to securely access the Paragon II switches and through them, any of the target servers. This also allows access to remote office servers from the data center. Says Ishiguro: "I'm just a little bit sorry to lose so many business trips. It's almost too convenient."

But he quickly adds that "Using Paragon II realizes stronger security and more efficient operation." – two things for which he is happy to give up business travel.

Customer:

Subaru System Service Co., Ltd.

Challenge:

- Improve effectiveness of management/control
- Improve security of server room

Solution:

- Paragon IIs
- P2-USTs
- P2-CIMs
- IP Reach M2

Advantages:

- Easy expansion of servers
- Decreased traffic to/from data center
- Remote operation allows IT manager to check status of server from his own desk



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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 50,000 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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