

Raritan simplifies management of virtualized environments

Because it so effectively addresses many critical issues facing today's data centers, server virtualization is one of the most important trends taken place in the IT industry. By consolidating multiple virtual servers onto one physical server, companies can save on hardware costs and administration overhead; reduce space, power, and cooling requirements; improve potential disaster recovery rates; and provide administrators with much more flexibility in deploying new applications.

However, along with its many benefits, server virtualization also brings an additional set of management challenges, including managing mixed virtualized and non-virtualized servers, increased vulnerability of the host servers, control virtual server and virtual center sprawl.

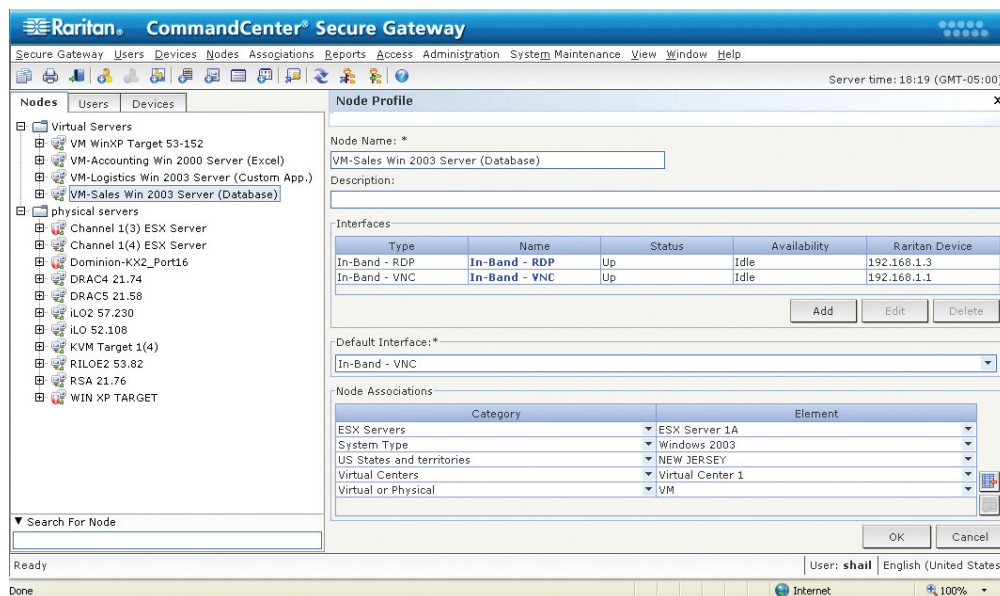
Raritan's access and control solutions are engineered to resolve the unique management problems posed by virtualization. By consolidating access to both physical and virtual servers into a single pane, Raritan simplifies administrators' daily interaction with otherwise complex virtualization deployments.

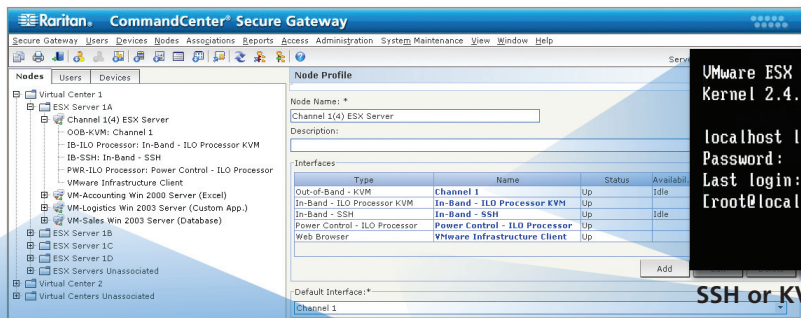
VIRTUALIZATION CHALLENGE #1:

Managing mixed environments of both virtual and non-virtual servers. While file/print, web, development, and custom application servers are likely candidates for virtualization, applications that are mission-critical or bear high user / CPU loads often remain on dedicated hardware.

RARITAN SOLUTION:

Unified access from a single interface. Raritan's CommandCenter® Secure Gateway enables you to manage your entire IT infrastructure – physical servers, virtual servers and networking devices – from a single interface.



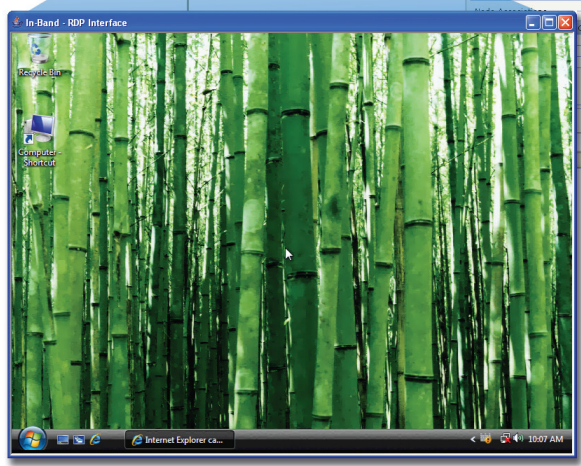


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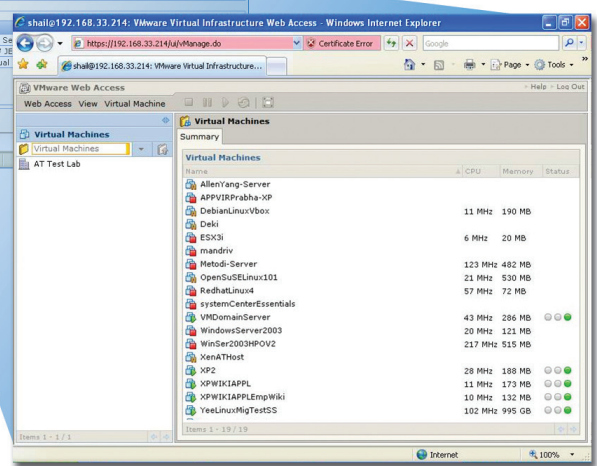
VMware ESX Server 3 (Dali)
Kernel 2.4.21-37.0.2.ELVmixon on an i686

localhost login: root
Password:
Last login: Tue Apr 17 22:06:17 on tty1
root@localhost root]#
  
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SSH or KVM access to ESX server



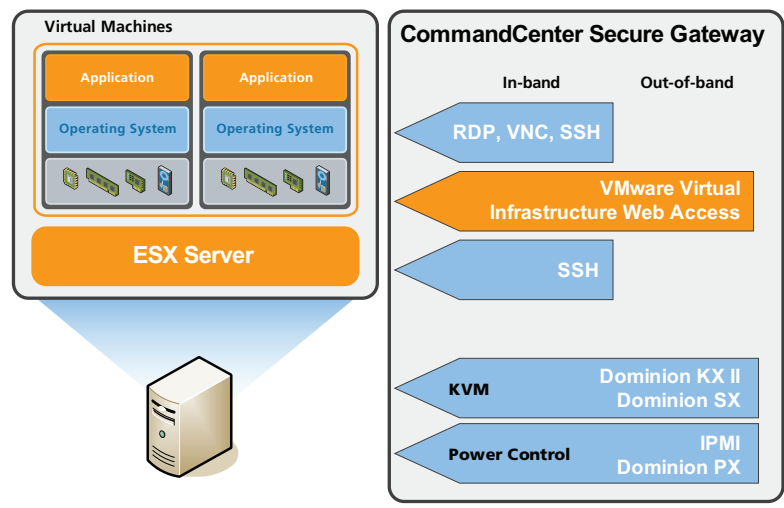
RDP access to Virtual Server



Instant link to VMware VI Web Access

You may already manage servers from multiple vendors, such as HP, IBM, and Dell; running multiple operating systems, such as Windows, Linux and Solaris. And you're probably also managing a growing number of virtual machines, enabled by VMware, Xen or Microsoft. Both hardware and OS agnostic, Raritan's unified access solution provides you with total control of everything in your IT infrastructure.

- ▶ **View your virtual servers alongside physical servers.** React quickly to server incidents from a single tool – By providing access to both physical and virtual servers from a single interface, users enjoy maximum usability and ease of operation.
- ▶ **Total control at every layer of the server infrastructure.** CommandCenter Secure Gateway combines out-of-band access tools (KVM-over-IP switches, serial console servers, and remote power strips) with remote control software (RDP, VNC, or SSH), giving you complete control of every layer in the virtual server stack.
- ▶ **Integrated access to proprietary virtualization interfaces.** CommandCenter Secure Gateway further streamlines management of virtualized environments by integrating access to VMware and Xen web interfaces.



VIRTUALIZATION CHALLENGE #2:

Increased vulnerability to physical server failure. A greater number of applications and users are impacted when a physical server running multiple virtual machines fails.

RARITAN SOLUTION:

Complete out-of-band control of physical servers. Raritan's solution helps safeguard these mission-critical assets.

In a virtualized environment, physical server problems can have dire consequences as multiple virtual machines and applications are simultaneously impacted when a host machine fails. Protecting the health of your physical servers and guaranteeing access to them at all times is crucial. Raritan's solution provides this extreme level of physical access.

- ▶ **Remote out-of-band console access.** Attached to the physical server's console ports (KVM or serial), Raritan's industry-leading KVM-over-IP switches and secure console servers allow you to access servers remotely during network disruptions, a non-responding host OS, and virtually any other problem conditions. As long as the physical console port responds, Raritan's out-of-band solutions can provide value long after a host OS stumbles.
- ▶ **Remote power control.** In a worst-case scenario, authorized IT administrators may, if necessary, power on, off, and recycle physical servers either via the industry-standard IPMI protocol, or with Raritan's Dominion PX intelligent remote power strip.

VIRTUALIZATION CHALLENGE #3:

Controlling complex, multiple virtual centers or extremely large deployments. Maintaining a single view with consolidated access policies and single sign-on capabilities can become difficult as customers deploy virtualization across multiple locations or in very large quantities.

RARITAN SOLUTION:

Centralized user authentication and authorization. The Raritan solution secures access to virtual servers and virtualization management infrastructure with a single point of authorization and logging.

Simplified provisioning of virtual servers can result in greater virtual server "sprawl" that requires safeguarding. Furthermore, multiple Virtual Center deployments (across networks or locations) compound the difficulties of infrastructure security.

Raritan's solution enforces user authentication and authorization from one easily managed platform: CommandCenter Secure Gateway. IT administrators can create sophisticated authorization policies that are consistently enforced for both physical and virtual servers alike. For example, one user group might be restricted to access only those Linux servers (whether physical or virtual) running Finance applications, on weekdays, from 8am–4pm. Whether server access is provided via RDP to a virtual server, or using KVM-over-IP to a physical server, CommandCenter Secure Gateway's stringent security layer provides the increased level of protection that today's IT professionals genuinely need.

Raritan 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 control millions of servers at more than 50,000 network data centers, computer test labs and multiworkstation environments around the world. From the small business to the enterprise, Raritan's complete line of compatible and scalable KVM and remote connectivity products 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.