

## Will Blades be a Part of Your Data Center? Interoperability Questions Answered.

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Not so recent introductions of blade servers have left end-users with a variety of questions.

Will they interoperate?

Will my applications run?

What will it do to my power and cooling?

What storage goes with a blade environment?

How do you manage the thing?

Well, now there is a single place to see the interoperability between products. The Server Blade Summit in Santa Clara, California will have an interoperability booth with participants from several companies. The interoperability booth is sponsored by the Blade Systems Alliance.

[www.bladesystems.org](http://www.bladesystems.org). The **Blade Systems Alliance (BladeS)** is an independent, non-profit organization of blade systems users, manufacturers, software suppliers, system integrators, and other interested parties established to serve as a clearinghouse for information about blade systems, provide a focus for extending and improving standards, and promote their use in enterprise applications. This is a good place to find answers to interoperability issues and to see hands on demonstrations of the products. The advantage of the interoperability booth is the fact they the manufacturers are showing their products in conjunction with others. At one booth, users will see a blade environment with storage and connectivity and even management.

The demonstration will include Siemon's MapIT, an intelligent patching solution for copper *and fiber*, which will map out and manage connections to the environment. This will allow end-users to see, pictorially, how the demo is put together and in real time, will document and manage any moves, adds or changes to the system. Users can view a virtual wiring closet and monitor connections in real time. For additional security and compliance tasks, a company can equip their racks with photo capability to snap a picture of anyone changing the infrastructure. The system will also document any new users and devices that enter the network at the physical layer.

The blade servers at the demo are from 3UP and Nexcom. 3UP's CMS-4U Blade Server system supports 12 Dual Xeon server blades; redundant Ethernet switches; four power supplies, one KVM switch, and three fan trays with 12 fans, all housed in a 4U chassis. CMS-4U blade server systems reduce power consumption by 50% comparing to 1U servers, and 30% compared to other blade servers in its class. 3UP systems will provide one server blade chassis, one iSCSI storage, and management software. In addition to demonstrate running applications in Windows and Linux environment, we would like to demonstrate the native diskless boot capability that we implemented on the server blades. The server blades will not be equipped with any hard disks, they will be booting up remotely from the image physically located on the storage system connected to the server via iSCSI over Ethernet. The integrated Ethernet switches support L2/3 switching with a total of 48 GE ports and two optional 10GE uplinks. The system's high-availability design goes above and beyond the no hardware single-point-failure level. Its iSCSI diskless boot capability allows dedicated standby blade servers in the chassis to back up any failed hardware or software. The integrated management system provides one management interface to manage the chassis, servers, storage, networking, switching, and applications.

NEXCOM is currently Taiwan's pioneer in blade server technology and market leader in industrial-grade network security appliances. Also on offer are industrial and embedded computing solutions and compact PCI platforms. These product lines can be used for a wide range of applications, they offer unparalleled reliability/durability because they are designed for continuous (non-stop, 24/7) operation and for mission-critical computing. NEXCOM's blade servers can be applied to hardware platforms and appliances for high-performance computing, clustering, fail-over and fault-tolerance CTI platforms, data communication, server farms, 3D rendering, media streaming, simulation, and other supercomputing or mainframe-like applications.

While its network security appliances are designed for hardware platforms and appliances for virtual private network, firewall, intrusion detection/prevention, anti-spam, anti-virus, content filters, and other network security applications.

Additional IP management is being supplied through Avocent with the following products. **DSR8020**, the 16-port Avocent® DSR®8020 KVM over IP switch offers BIOS-level control of connected servers and serial-based devices. The Avocent® DSI5100 IPMI proxy appliance provides IT administrators with remote, out-of-band server management. The DSI5100 does this by taking advantage of the Intelligent Platform Management Interface (IPMI) commonly found in today's servers - many of which use Avocents IPMI firmware and software. **DSView 3** Avocent® DSView® management software, provides secure browser-based control of all of the local and remote servers and devices in your IT infrastructure. DSView 3 management software system is the IT industry's only fully redundant, replicating database solution for network administrators, taking remote management of data servers and serial devices to a new level.

The devices will be enclosed in the The TigerShark™ II Computer Cabinet. Experience acquired in hundreds of data center deployments has enabled SharkRack to develop the industry's best-engineered computer cabinet — the TigerShark™ II. This advanced enclosure reduces total cost of ownership and increases availability by providing highly efficient management of space, cooling, power distribution, cabling and security, plus remote monitoring and control.

Other systems will include a Magnitude 3D model 100e with 2TB of storage. Emulex will supply some HBA cards, and APC will have power and cooling solutions. IBM is also expected to have a presence in the booth. Putting all of this together will be Unisys, who will also have equipment in the booth. This is one place to evaluate vendors face to face and on the same network!

This show is worth checking out if you have questions on interoperability. If your favorite vendor is not listed at this show, please check out the TechTarget shows including Storage Decisions, Networking Decisions and Data Center Decisions. The combination of these shows will assure that you have all your answers for your technology plans and your data centers. For more information on the Blade Systems Alliance and member companies dedicated to interoperability, visit their website.