



scalent & blade servers

Benefits of Scalent V/OE:

Reliability

Scalent ensures that your Blades can failover, without human intervention, in the event of downtime.

Speed

Scalent enables your Blades to go from dead, bare metal to live, networked servers in five minutes or less.

Ease

Scalent saves you from having to manually replicate changes when swapping out Blades, and from the errors that manual replication can introduce.

Scalent Enables Real-Time Blade Infrastructure

Do you own a server farm with hundreds or even thousands of servers, but still have trouble keeping pace with the changes in demands of your business? Did you install Blade servers to take advantage of their condensed form factor -- which decreases the consumption of power, cooling, space, and management overhead -- higher compute density, and lower price, but find yourself wrestling with the challenges of maintaining a consistent management, capacity, and business continuity approach across different operating systems, and between your Blades and non-Blade hardware?

You're not alone. Many of today's data centers are running Blade server configurations from multiple vendors along with enterprise hardware in a mixed OS environment. However, the simplified and condensed form factor of Blades hooks each Blade server, along with the associated networking and storage, within a chassis. There aren't any individual power switches, cables to be moved, or manual management processes. Blade management can be done only via software. Errors and failure can be more costly because one mistake can bring down many machines within the Blade chassis. As a result, your management overhead can still continue to escalate:

- **Physical Infrastructure Costs:** Deploying Blade servers can help lower your IT costs compared with the investment in enterprise servers and related networking hardware. These expenditures inflate the cost of IT, while reducing average system utilization -- giving the appearance of reduced IT efficiency.
- **Management Complexity:** With Blade servers, your data center resources are consolidated down to a smaller form factor, which in turn condenses points of failure to within a Blade chassis running many servers. Even within a chassis, the environment may utilize server and network hardware, operating systems, and applications from many vendors.
- **Performance:** Systems must recover from downtime within increasingly shorter time periods, and with full "bare metal" performance. Whether you're running Blade servers, legacy hardware, or a combination of both, there is a high impact associated with downtime stemming from any part of your infrastructure.

Scalent: Award-Winning Software for Real-Time Infrastructure

Scalent Virtual Operating Environment (V/OE) software enables you to rapidly repurpose Blade servers in addition to other enterprise servers, x86 and SPARC, running various operating systems. Using Scalent software, you can transition your data center between different configurations or from bare metal to live, connected servers in five minutes or less without physical intervention or infrastructure changes.

This flexibility is possible because Scalent software dynamically controls not only what software stacks are running on every server, but also each server's associated network (LAN / WAN) connectivity, storage (SAN / NAS) access, and power state.

The process is straightforward and non-interruptive. Scalent simply captures each production server software stack (x86 or SPARC, running Linux, Windows, Solaris, or virtual machine hypervisors such as VMware or Xen) as an image on centralized storage, along with the server's network and storage configuration information. Then, when a business system -- for example, an email server cluster -- must move to a new physical machine, the system's required software, existing network addresses and topology, and storage connectivity will all automatically be re-established at the push of a button on that new hardware.

With Scalent, there is no need to physically reset switches, re-rack servers, or reconnect cables. Nor is there any impact server performance, as Scalent software is not in the data path: systems are still running directly on their original hardware, virtual or real machines.

The result: IT teams can rack once, cable once, then effortlessly reconfigure and repurpose server infrastructure as needed. Server and business system shifts or recovery become a logical, real-time, automatable activity instead of a physical activity. In short, data centers can create an adaptive infrastructure.

"Scalent is attempting — and succeeding — at reaching the pinnacle of datacenter management: a truly adaptive infrastructure."

-- *Infoworld Magazine*,
2007

How Scalent Reduces Cost & Complexity

- **Lowers infrastructure overhead** by reducing redundant, under-utilized infrastructure.
- **Simplifies management** by removing the need for physical reconfiguration, providing automated real-time monitoring, and as-needed reconfiguration.
- **Increases performance** by enabling on-the-fly movement of servers across Blades and stand-alone servers.

Scalent's Solution

Scalent partners with Blade server vendors to bring together Blade hardware with software specifically designed to take advantage of enterprise hardware and/or Blade characteristics. Scalent V/OE software allows users to:

- **Reduce Costs: Swap blades without reconfiguring LAN and SAN.** Automatically move the entire network and storage connectivity with the server, so Blades can seamlessly take up workloads.
- **Increase Flexibility: Deploy Physical and Virtual Machines in real-time.** Change whether Blades are running workloads directly on the physical Blade or in virtual servers at the push of a button – as well as automatically adjusting the associated network and storage connectivity
- **Improve Performance: Provide rapid-restore and failover for blades.** Provide N-to-1 failover where any Blade workload could be brought back online on a standby blade, or even a rack-mounted server, while preserving all the network and storage connectivity associated with the failed blade.



Scalent Software Can Easily Repurpose Blades

Summary

Deploying Scalent software in your IT environment enables you to take advantage of all the benefits of your Blade hardware while managing the ever-increasing growth, efficiency, flexibility, and heterogeneity of your data center. As a result, Scalent and Blade server vendors can help build a real-time infrastructure that reduces operational costs, reduces management complexity, reduces power consumption, and increases responsiveness within any heterogeneous environment.

Scalent Systems, Inc. is the leading provider of server repurposing software that enables large data centers worldwide to build real-time infrastructures. Scalent's Virtual Operating Environment (V/OE) software enables data centers to react in real-time to changing business needs by dynamically switching server configurations and how those servers are connected to network and storage. The result is a real-time infrastructure, where data centers can transition between different configurations – or from bare metal to live, connected servers – in five minutes or less, without physical intervention. Using Scalent software, companies have been able to implement cost-effective solutions while reducing server counts, simplifying manageability, and increasing reliability. Many Fortune 1000 companies rely on Scalent to support their growth and success, having adopted the software as an integral part of their IT operations.

To learn more about how Scalent can help you, please visit www.scalent.com or call 1-866-4-Scalent.

