









Chapter 1: Selling Blades

To successfully sell blade servers you must first identify ideal blade server candidates, then convey how deploying blade servers will benefit their environments. This chapter provides blade server selling points.





Chapter 1: Selling Blades

Table of Contents:

Blade server channel opportunities: HP, IBM, Dell?

HP offers expert service contracts VARs can resell for ProLiant blade servers

Blade server options for SMBs

Selling blade servers

The blade server market outlook for networking resellers

Blade server candidates

Choices abound in blade servers

Blade server channel opportunities: HP, IBM, Dell?

Barb Goldworm, Contributor October 9, 2007

With many changes in <u>blade servers</u> over the past year—in products, programs and market share—blades today represent significant opportunities for channel partners. Understanding these changes and the major vendor offerings (in particular from HP, IBM and Dell) can help you make smarter decisions about whether to jump on the blade server bandwagon, when and with whom.

Blade server product offerings and changes

In general, blade server systems have continued to grow from adolescence to adulthood this year. As articulated by HP's "Blade Everything" slogan, most vendors have moved from the early days of low-end blades to today's broad product lines through which anything offered on rack servers is also available on blades. Other improvements include I/O and power advances, addressing previous concerns around blades as a platform for virtualization. Today's blade servers offer:

- Dual-core and quad-core processors.
- Two- and four-socket blades.
- High-speed interconnect options—GigE and 10GigE, 2 and 4 MB FC, InfiniBand.
- Support for increased I/O capability (number of NICs, HBAs, aggregate speed).
- Improvements in power and cooling efficiency and power management.
- Advances in I/O virtualization.

Some blade server specifics by vendor:

HP

HP's new-generation <u>BladeSystem</u> c-Class chassis was introduced last year, with significant improvements in I/O, power and cooling and overall architectural advances. The blade server system has been extremely well-accepted by users, both traditional HP customers and converts. Other features of HP's blade server offerings include:

- Virtual Connect—HP/QLogic module which allows pooling of Mac Addresses and WorldWide Names to simplify configuration management for both IP and FC networking.
- Workstation and PC blades—options for both PC blades which run in their own chassis for PC-level function, and workstation blades which run in the c-Class chassis and offer high-end workstation capability.
- Integrity Blades—built on Intel Itanium platform for enterprise-/mainframe-class capability on a commoditized server.

IBM

IBM BladeCenter now offers five different chassis options, with forward/backward compatibility to the earliest IBM blade servers, and blade interoperability throughout the product line. Newer chassis have improved on high-speed options and power efficiency.

- The newest chassis is the BladeCenter S, packaged for small and medium-sized businesses (SMBs) and remote branch offices as a smaller and simpler chassis with switched <u>SAS</u> storage built-in. It is slated to ship Q4 2007.
- Open Fabric Manager allows central management of pooled LAN and SAN connections across thirdparty switches, with additional automated failover capability.
- Workstation blade using new graphics compression capability from Teradici for remote high-end 3D graphics at near local speed. Slated to ship in late September.

Dell

Dell's PowerEdge blades are consistent with Dell's overall approach, offering a lower-cost, easy-to-use, commodity product.

- Focus is on simplicity of the out-of-the-box experience.
- Lower-cost options than HP and IBM.
- New chassis coming soon, which Dell says will address ease of deployment and power and I/O improvements. Will replace current chassis/blades.

Blade server partner programs

All three vendors are talking about significant investment in enabling the channel, particularly in the <u>SMB</u> space. All described a variety of programs being launched to help channel partners come up to speed on everything from how to sell **blade servers**, how to set up service offerings around blades, how to set up blade solution centers and specific blade features. Here are a few examples of what vendors are doing to help the channel with blades:

ΗP

- <u>Blade Builder University</u>—a free class on how to sell blade servers, how to make money, overcoming objections and myths and training in power and networking (may be new to partners used to selling only boxed servers).
- <u>Blade Connect</u>—an online blade community for connecting partners, customers and experts around blades and specific issues.
- Blade Elite program—rewards and incentives.
- Blade sales tools—an online system selling guide, power calculator and TCO tool.

IBM

• <u>Business Partner Innovation Centers</u>—IBM says they are investing in these innovation centers to allow users to see new technology and to help jump-start the channel.

- <u>Blade Migration Centers</u>—offering services and training on management tools, deployment, blade hardware and virtualization. Staff from development labs work with customers to help make the transition from racks to blades easier. For no cost, advocates provide services at the customer's site.
- Blade and Storage Solution Centers—a new program for showcasing solutions for SMB clients at selected channel partner sites with financial support from IBM, including hardware and software.
- Partner Advocacy Program—for a select group of partners, allowing direct feedback to IBM on BladeCenter.

Dell

No specifics yet, but new direction from Michael Dell is to increase focus on the channel.

Blade server market

Market share numbers over the past few years have consistently shown IBM and HP vying for the lead, each having between 35% and 40% of the market share, with Dell lagging behind at 9% to 11%. This year, for the first time, HP passed IBM in its market share by quarter, for several quarters in a row. Speculation credits this shift in leadership to the improvements in the HP c-Class chassis, and/or to HP doing a good job of listening to both its customers and its channel partners. IBM hopes that its new SMB chassis will help it regain its lead in the coming quarters.

The blade market overall has continued to grow, despite a general slowdown in overall server shipments, most likely due to consolidation and virtualization. Although blades currently represent only 5% to 10% of the server market, IDC has estimated that blades will grow to 30% of the server market by 2009. According to an IDC report in 2007, adoption of blade servers for virtualization was 26.7%, over four times that of the general market. Clearly blades represent a growing opportunity, particularly in consolidation and virtualization. If you haven't investigated blades yet, it's definitely worth a look, especially given the motivation of the major vendors in using blades as a way to engage the channel and go after the SMB market.

HP offers expert service contracts VARs can resell for ProLiant blade servers

Nicole Lewis, Senior News Writer May 11, 2007

Hewlett-Packard Corp. today introduced a new program that offers high-level expertise to customers having trouble with power and cooling, server virtualization, security and other difficulties that they experience as they deploy HP's <u>ProLiant blade servers</u>.

The HP Proactive BladeSystem Service program allows customers to sign a one-year contract that will give them access to an HP expert trained in planning, deployment, tuning and optimization of <u>blade server</u> implementations.

HP noticed that many of its customers were having difficulty with its blade servers and had to move quickly to develop a program that would address the problems, according to Brian Brouillette, vice president of HP's mission critical services group.

"There were a couple of customer trends that we were seeing. People were surprised that power and cooling was an issue, and they had no frame of reference or expertise to deal with it," Brouillette said. "The time to successfully get a new set of hardware into a production environment was taking longer, and then taking advantage of virtualization software was harder than it first appeared."

At a cost of \$33,000 the service is aimed at customers deploying 50 blades or more, specifically with HP's ProLiant blade servers. The program will be available worldwide starting today through all channels, but executives particularly stressed that during the 10 months of the program's development HP had its channel partners in mind.

Partners can either resell the basic service or sell it as part of a package of hardware, software and services to customers, according to Dan Socci, vice president of sales and marketing, for HP's technology services. While the executives refrained from saying how much margin a partner can expect, they did say channel partners can make a good profit margin from selling the service.

"This service fits our partner choice model so we enable our partners to resell almost the entire support services portfolio from HP, and we do have most of that in a packaged form," Socci said.

"One of the key pieces of feedback we heard from the channel when we were designing this is they really wanted to see HP offer a one-year as opposed to a three-year contract because it gave the channel an opportunity to go back in, year in and year out and have a relationship with the customer," Brouillette said.

"The service is a support to VARs, enabling them to offer a more complete service to their customers," said Brandon Harris, director of HP solutions at Bloomfield Hills, Mich.-based value-added reseller (VAR) Logicalis US.

"Logicalis sees this as a very positive announcement from HP. It validates what we've been seeing ourselves, that HP blade systems are becoming more mission critical for our customers," Harris said.

Dan Molina, chief technology officer at HP partner Nth Generation Computing Inc., echoed Harris' reaction and said the service was a good one for VARs. Molina also said his customers have not had significant troubles with the deployment of ProLiant blade servers, because Nth Generation had certified consultants and engineers to provide best practices. Still, certification is difficult, Molina said.

"The learning curve is significant, and that's why we've had to provide ample transfer of knowledge to explain these hot new technologies in addition to the needed planning and preparation tasks required prior to starting any BladeSystem deployments," Molina said.

Once the systems are sized, installed and configured properly, the benefits far outweigh the initial learningcurve challenges and this keeps our clients highly satisfied, which in turn results in continued business," Molina added.

IDC analyst Matt Healey said the offering allows customer to deploy a large bladed environment, get the proactive services that they need and have the installation costs covered under an agreement.

"When customers need to expand the environment by deploying more blades they are not caught in a situation where they have to continue to buy additional support services for each new blade that's deployed," Healey said.

Gartner analyst Ron Silliman said HP should be commended for including its channel partners at the outset. "HP has done a good job of thinking through the basic issues and in particular of creating an opportunity for the channel in this process, rather than creating the service and somebody figuring out 12 weeks later that they should think about the channel, too," Silliman said.

Blade server options for SMBs

Mark Arnold, Contributor April 26, 2007

Talk to most IT managers at small and medium-sized businesses (SMBs) about blade servers, such as the <u>IBM BladeCenter series</u> or <u>HP ProLiant BL servers</u>, and they will probably be quick to tell you the technology isn't for them: It requires far too much expertise, supporting infrastructure and financial outlay to make it worthwhile.

Then you ask how many servers are in their server closets and the numbers will be in the mid to late teens rather than countable on one hand. If you work in IT provisioning you can immediately see your inroad here; the manager has more servers than a single standard blade chassis will hold.

Why do blade servers make sense for SMBs? For one, floor space is often at a premium. Anything to reduce the server room footprint is welcomed.

Let's take a typical Microsoft-based infrastructure. There may be an ISA Server to provide proxy services, SQL Server and Exchange, a couple of domain controllers, perhaps a Web and an application server, as well as the ubiquitous file and print server. That's eight servers so far. Some old servers won't be rack-mounted, taking up too much space. Those that are rack mounted are probably between three and four "U" each (a "U" being an inch and three quarters). The space taken up by a chassis of up to 16 blades is around 6U.

Virtualization is another possibility. Many SMBs will notice servers are underutilized. Domain controllers will operate at around 5% processor capacity; other servers are not likely to be much higher; even Exchange

and SQL Server will be in the 20 to 40% range. Reducing the number of processors on the server room floor will alleviate the budget in any number of ways. Small organizations considering virtualization may be dissuaded because they don't have space for a spare server to take the load of virtualized guests should a physical host fail. Hosting a number of blades will allow "guest redistribution" to take place with a greatly reduced financial outlay.

When it comes to managing the blade infrastructure, your options are equally attractive. For example, fewer high-speed networking ports are required as the blade backplane is responsible for handling network traffic. Instead of the previously mentioned eight servers using 16 network ports (because you want to provide resiliency, don't you?) they can operate using between four and six. Network switches are still one capital item that businesses overlook, only to cobble together what they can from wherever they can. Power is another example. How many SMB server rooms look like a veritable rats' nest with adapter blocks around the room drawing more power for longer times than they were designed for?

Server monitoring is another task of concern. With a blade chassis in the server room, monitoring becomes much easier. Hardware and operating systems health is now managed by a single console on the desk of the "IT Guy."

To summarize then, blade servers will be either the same or cheaper to procure or lease, take up less space, be centrally managed and use less peripheral infrastructure than comparable standalone servers. It is worth another look, especially for the SMB.

Selling blade servers

Barb Goldworm, Contributor March 19, 2007

SearchSystemsChannel.com: How can channel professionals encourage end customers to adopt blade servers? Can you discuss the main selling points?

Barb Goldworm: The selling points for <u>blades server</u> start with significant value from high density. The number of servers that you can fit in the same footprint in your data center is substantially higher. Implementing blades is going to allow me to pack more servers in the same <u>footprint</u>. But the important selling points have to do with bottom-line dollar amounts: It may cost more upfront to move to a blade architecture because you have to purchase the chassis, but the benefits include more efficient power utilization, more efficient cooling capabilities and components sharing. From a simplicity standpoint, blades offer significant benefits because everything is prewired inside the chassis. We have a picture in our book of a server room with wires running all over the place, and then we show a picture of a populated blade system and the wiring is perfect looking and not just because of a good IT guy. Prewiring and modularity also translates into less time to provision new servers. If I—as an IT professional—need to deploy a new server out to my end users, both blades and virtualization can make that provisioning very simple; all I have to do is pop

in a blade (if I even need to do that) provision it and bring it up live. If I'm using VMware or a server virtualization tool, then I can provision it virtually. I might not even need to add a new piece of hardware.

What we hear from users is that with blades and virtualization, the time to provision—the time from when they get a request until they can bring the users up—has been dramatically reduced, sometimes from weeks down to hours.

The blade server market outlook for networking resellers

Carrie Higbie April 16, 2007

According to Greg Schulz, founder and senior analyst of <u>The Storage IO Group</u>, <u>blade servers are growing in popularity among SMBs</u> because of their "modularity, which allows growth and flexibility without compromising processing capabilities."

This sort of forward thinking and cost awareness is exactly what customers look for from their value-added resellers (VARs) and networking consultants. As a result, an intimate understanding of the blade server market can help a VAR or systems integrator better sell these appliances, as well as keep them up to date and running smoothly.

Carrie Higbie, global network applications market manager at <u>The Siemon Company</u>, recently took the time to answer some of SearchNetworkingChannel.com's questions via email about the blade server market.

SearchNetworkingChannel.com: How will the competition between <u>HP</u> and <u>IBM</u>'s blade servers play out in the foreseeable future, and how will the ease of networking configurations play a role in which vendor has the competitive edge?

Carrie Higbie: Both are feature rich products. I think, personally, that the key is going to be which one has lower power consumption overall. At this point, that is IBM. They have worked to create more efficient power supplies and have built in cooling features. The IBM servers are also backwards compatible, which cannot be said for HP. IBM has not changed the core of their box from version to version. Backplane speeds are also a consideration, but either works well. As both run over Ethernet, the networking side is not a real advantage for either vendor. However, with 10GBASE-T components coming out, then that capability may change that equation based on who launches the first and lowest power-consuming version. IBM offers several connection types and numbers of network connections, which may provide an advantage in throughput for storage and networking.

SearchNetworkingChannel.com: What are your thoughts on <u>Sun</u> and <u>Hitachi</u> blade servers? How is their blade sales program shaping up, and what will be their networking challenges?

Carrie Higbie: Overall, blade shipments account for about a quarter of all server sales in the last survey I read on ITFacts.biz. This is split between IBM, HP, Dell, Sun and a few others, including Hitachi. Sun has made quite a comeback with their blade servers and things like grid computing have certainly helped. The remainder of 2007 will be a great year to see how some of the newcomers fair in this market. As for their networking challenge, and I would say this of all blade server vendors, it is going to be in the ease of administration from one platform to another. In reality, many data centers have a combination of equipment. While work is underway to have better administrative consistency across platforms, that is still a ways out.

SearchNetworkingChannel.com: In February, HP added the <u>Cisco</u> MDS 9124e fabric switch, a 4Gbps, 12-port or 24-port Fibre Channel switch that plugs into HP's c-Class blade server chassis. The switch joins similar blade switches from <u>Brocade</u>. As <u>Cisco</u> and Brocade continue to compete in the switching space, what trends are shaping up? What security issues exist and what do you see moving forward?

Carrie Higbie: The switching space is certainly heating up—not just between Cisco and Brocade, but there are many other players as well. The key is interoperability. As vendors add compatibility with storage towers, options grow exponentially. From a security standpoint, the biggest issues that I see are training and transfer of knowledge after a blade is implemented. As IT managers are taxed with just handling their day to day jobs, not all have the training needed to properly secure new technology due to lack of understanding. Also, some will run custom pieces of code to handle various tasks, which may be lost during upgrades. Disaster recovery and business continuity concerns are also not always addressed during new implementations, which can leave companies vulnerable in the event of failure or disaster. Switch shipments are increasing as customers are implementing Gigabit ethernet to the desktop and other technologies. We'll have to revisit this question in Q3 and see where things are then. It should be a very interesting year.

Blade server candidates

Barb Goldworm, Contributor March 18, 2007

SearchSystemsChannel.com: Where are blade servers a good fit? Or, what kind of shop is the ideal blade server candidate?

Barb Goldworm: If you have a geographic location that has one physical server, <u>blades</u> are not a good candidate. Blades by their design go into a chassis and to implement blades you first need to buy the <u>chassis</u>. You then populate the chassis with some number of blades. If all I have is one server, it costs more to deliver the chassis and put one blade in because I have to spread out the cost of that chassis across multiple blades. In general if you are running less than five servers in one location, it is probably not cost effective to go to a blade architecture.

If you have more than five servers in a location, it's worth taking a look at blades for the high density and modularity benefits we've already discussed. In addition to enterprise data centers, there are some nice things about blades in an SMB environment, particularly if you have similar remote offices. I can configure a chassis to have some number of blades in it, running a variety of servers: Web servers, application servers, email servers and database servers, for example. I can put all of those inside my blade chassis and have it as a preconfigured mix. I might have that in different branch offices and make them identical. IBM sells these types of offerings as "retail center in a box," or "data center in a box," or "branch banking in a box."

Also, remote locations with no IT staff can be a good fit for blades because of their strength in remote lights-out management capabilities. Blade manageability was designed from the outset to be a part of blade server systems. There are redundant management modules designed as a part of the blade chassis, for out-of-band management: Let's say I'm running a number of blades and my operating system crashes on one blade. I can still get to that blade, even though the OS is down. I can do everything to that blade system remotely that I can locally, except for physically popping out the blade. I can power them on and off; I can reconfigure them; I can do my operating system-level maintenance on top of that. They are well suited for remote management: disaster recovery, availability, failover and anything else that could go wrong. Because of the modularity, someone who is not an IT professional can look at the lights that are flashing or not flashing on the display, pop out a blade, pop in another blade, stick the broken blade in a Fed-Ex box and ship it off.

Choices abound in blade servers

IT Business Edge September 20, 2006

IT Channel takeaway: Blade servers continue to get regular press, but how do they stack up? Find out how blades can possibly be a benefit to your company. With Charles King, principal analyst, Pund-IT, Inc.

Question: Blade servers seem to be getting a lot of attention lately, due mostly to their ability to scale up quickly and easily. But aren't there still many environments in which a traditional rack-mount, or even a tower, would suffice, and at a better price point?

King: Sure. Blade servers are really aimed at businesses that need to squeeze maximum performance and flexibility into as small a space as possible, so they provide superb solutions for server/data center/application consolidation efforts. The ability to swap out or install new blades on the fly makes them a good choice for companies that plan or expect to regularly grow their server environments. For many companies, particularly SMBs, work groups, and remote office environments, rack or tower servers often provide a great mix of price/performance. But the blade market is changing so swiftly that it's wise to keep an eye on new offerings, in case something comes along that can significantly improve business performance or support entirely new kinds of applications.

Question: Sun pulled out of the blade market last year because it didn't have confidence in its product. How do the company's new products stack up against HP's and IBM's lines?

King: Hard to say, since the details have mostly been sketchy with an emphasis on enhanced I/O performance. I expect Sun's new blades to leverage what Sun has learned (and profited from) in its Opteron-based servers, and to emphasize the company's reputation for engineering innovation. That should speak well to Sun's existing customers, but it's hard to say how others will respond. Historically, the company has had a hard time sustaining efforts beyond UltraSPARC/Solaris.

Question: Cooling and power consumption continue to see a lot of activity. Should IT executives invest in blades now, or wait to see if even greater gains can be had later?

King: That's an issue with a two-sided response: Over time, blades (and other server architectures) will almost certainly become more powerful and efficient, and power costs will almost certainly increase. However, timing IT purchases to obtain maximum value is difficult, at best. To be successful, IT purchases need to be the result of larger strategic efforts aimed at providing maximum support for critical processes or emerging opportunities. Cooling and power consumption issues are merely two elements to consider in the larger scheme of things.