



An SMB Roadmap for Making the Right 2011 Technology Choices

Is your business really ready for growth in 2011? It should be.

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Even as your business demands ratchet up, your customers still expect high quality and top performance for the money they spend. So to remain competitive, your business must be able to deliver the value your customers want at the price-point they're willing to pay.

That means you need to run business and technology applications more efficiently and productively than ever before. And to boost your efficiency and productivity, you'll need to grow and evolve the technology that runs your business.

You are Here

Small and mid-size businesses enjoy an important advantage: They can adapt much faster to improving business conditions than larger enterprises.

So as you consider growing your business with an eye to deploying information technology that can strengthen your business's ability to compete and thrive, there maybe a number of difficult IT challenges along the way.

You may have to stretch limited budgets that must handle all aspects of your business — not just IT — and chances are you'll find yourself scrambling to catch up with delayed infrastructure improvements. Along the way you might be faced with confusing technology options and experience an intensifying desire to spend less time worrying about technology challenges.

You might also feel a level of uncertainty about how to match your IT investments to real business needs so that you're not too far behind demand, but not too far ahead of it either.

>> **Struggling to match your limited technology budget to your changing business needs?**

Need to catch up on postponed infrastructure updates to meet the demands triggered by business growth or take advantage of cost-saving new technologies like virtualization?

Looking for an easier way to navigate confusing technology options so you can make the right choices the first time and concentrate on running your business?

Uncertain about how much IT investment to make? What's the price of underestimating demand?

Where are You Going?

How you handle your technology needs depends on where your business must travel to become as competitive as possible.

If your business needs to...

- > **Implement virtualization as an IT/data center strategy** to more efficiently scale out and meet a potential increase in business needs,
- > **Create a solid, consistent, high-value compute/collaboration infrastructure** for your IT environment, or
- > **Deploy a platform that scales cost-efficiently** to handle large numbers of applications and users

... then read on so you can recognize the signposts that can help you decide whether you're choosing the right server platforms — platforms able to help you manage the journey past today's IT challenges so you'll get the most for the 2011 IT spend to help prepare your business for success.

Getting There: Find the Freedom to Grow

Ideally, you want to deploy the server platforms you need today and still be able to trust that you won't outgrow them anytime soon.

A stable, forward-compatible platform that can grow with your business. Consider servers built with processors that are next-generation-compatible, enabling you to take advantage of new technologies without changing platforms.

Virtualization-ready. Look for built-in virtualization technologies as well as tight integration with VMware, Microsoft®, and others to help you get more work done per server as you move into or expand a virtual environment.

Scalable. Processor platforms in a wide range of form factors and multiple processor configurations (1, 2, or 4P) mean you can meet a variety of application needs — and buy what you need now, safe in the knowledge that upgrading processors or memory tomorrow is easy, since you'll have a platform with the headroom to handle that extra load.

Getting There: Focus on Value

The server platforms that deliver the most for your organization offer long-term business value without compromising on performance.

More for your money, thanks to enterprise-class computing features. Look for a leading OEM with a wide range of mainstream server products and high processing power per dollar.

Choose a server that has been architected to deliver higher performance for demanding workloads. Your servers should be designed to deliver the appropriate levels of performance to meet your business needs both today and down the road. That means choosing servers with the right blends of technologies, including multi-core processors with high core counts, more I/O resources, and more memory expandability for your increasing bandwidth requirements.

To help make deployment and updating easier and less confusing, work with a technology partner who won't compromise features just to deliver low prices. Make sure to look for built-in features and technologies, a consistent feature set regardless of power band, chipsets, frequency, or number of cores — so that you have the technology you need for today but can scale easily tomorrow.

That's how your business can handle today's and tomorrow's growing file sizes and intensifying workloads that result from increasing use of Internet-based collaboration and communication tools, graphics-intensive applications, etc.

Choice of energy footprints. AMD technology-based servers are offered in a choice of energy footprints that include standard, ultra-low power as well as high-performance products that can match your workload and power requirements and handle demanding server workloads — all at minimized energy draw.

Getting There: Turn to Technology You Can Trust

Not all server platform technologies and vendors are created equal. Certain features and capabilities make all the difference:

Designed to reduce downtime. The right reliability/availability/security(RAS) features can help reduce downtime risks by turning off cores and bad memory cells, and enabling automatic switching to online spares in the event of problems.

Standards-based. Servers built using open standards enable you to get all of the benefits you expect from a business-grade system — without being locked in to a single vendor's expensive, proprietary platform because shifting to any other solution is too disruptive.

Also, look for integrated standards-based security features to keep your systems up and running, and open manageability standards that enable you to control your infrastructure free from the vendor lock-in of proprietary designs.

Energy efficient. Should heat and noise be an issue you want to mitigate, look for vendors who have included architectural designs and features that manage power to maximize energy efficiency and reduce heat and noise without sacrificing workload performance.

Software ecosystem and partnerships. Look for a vendor who works closely with leading software providers to help ensure a stable, supportable platform that's optimized to enable exceptional performance in virtual environments.

How AMD Opteron™ Processor-based Servers get You There

Small and mid-size businesses have to run lean to succeed. That's why AMD Opteron 4000 and 6000 Series platforms are designed to deliver the right technology at the right time for the right price.

Architectural power: AMD offers several choices of processors to meet your business needs. The AMD Opteron Series processors provide more high speed internal processor interconnections as well as the memory channels and I/O resources to deliver more bandwidth.

The AMD Opteron 4000 Series platform is ideal for power-efficient and cost-conscious customers. Customers seeking performance and scalability will find what they need in the AMD Opteron 6000 Series — the world's only 8-core and 12-core processor family.

Ease of ownership: With more consistent features that span entry-level systems to high-performance computing clusters, AMD technology-based servers are easy to own, requiring fewer software images and drivers to manage and minimizing pre-production testing.

Each processor within its series, regardless of power band, chipsets, frequency, or number of cores, offers a consistent feature set, reducing confusion when it's time to buy.

Long-term scalability: AMD Opteron processor-based platforms offer a wide range of 1- to 4-socket configurations, so it's easy to find the right solution for the needs of rapidly growing businesses. You can buy to your budget today knowing it's easy to upgrade tomorrow by adding more memory or more processors.

When you choose servers featuring AMD Opteron processors, you'll get the peace of mind that comes from knowing you have the cost- and energy-efficient performance you'll need for 2011's demanding workloads — as well as the growing room you'll need in years to come.

AMD technology-based servers are designed to deliver business value right now and for many tomorrows to help your 2011 technology investment pay off for the long haul.

What Do You Want to Do This Year?

| What you need to do | Key capabilities required | AMD processor-based servers | What these AMD processor-based servers deliver |
|--|--|--|---|
| Implement virtualization as a strategy | <p>Low cost per virtual machine</p> <p>Solid mainstream workload performance that minimizes IT environment cost and space</p> <p>Platform(s) optimized for virtualization</p> <p>More processor cores and more memory channels, so virtualization runs efficiently</p> <p>Servers based on processors from a vendor that partners with leading virtualization software providers and OEMs</p> <p>A top OEM brand with reputable support</p> | <p>Acer GR385 F1 rack server</p> <p>Acer GR585 F1 rack server</p> <p>Dell R415 rack server</p> <p>Dell R515 rack server</p> <p>Dell R715 rack server</p> <p>Dell R815 rack server</p> <p>HP BL465c G7 blade server</p> <p>HPBL685c G7 blade server</p> <p>HP DL385 G7 rack server</p> <p>HP DL585 G7 rack server</p> <p>IBM x3755 MB rack server</p> | <p>Lower cost per virtual machine</p> <p>Configurations offering 4-processor performance (with up to 48 cores) at 2-processor prices, plus more memory channels. (Based on comparison of 4 memory channels for AMD Opteron™ 6100 Series processor vs. 3 memory channels for Intel Xeon 5600 series processor. See http://www.anandtech.com/cpuchipsets/showdoc.aspx?i=3733)</p> <p>Built-in AMD Virtualization™ (AMD-V™) technologies help you get more work done per server</p> <p>Scales to meet application demands and/or an expanding number of virtual machines</p> <p>Compatible with the next generation of AMD Opteron processors, so you can easily take advantage of new technologies without changing platforms (BIOS update may be required)</p> <p>Available from leading OEMs</p> |
| Get the most compute for your money | <p>Ability to get the right level of compute for the right price without compromise in features</p> <p>Large memory footprints for high-performance or cloud applications where previous-generation processor capabilities fall short</p> <p>Power efficiency features that help maximize the density of compute clusters</p> <p>Flexibility to choose platforms optimized to higher thread count or higher frequency</p> <p>Easy to manage and secure</p> <p>A top OEM brand with reputable support</p> | <p>Acer GR385 F1 rack server</p> <p>Acer GR585 F1 rack server</p> <p>Del R415 rack server</p> <p>Dell R415 rack server</p> <p>Dell R515 rack server</p> <p>HP BL465c G7 blade server</p> <p>HPBL685c G7 blade server</p> <p>HP DL385 G7 rack server</p> <p>HP DL585 G7 rack server</p> | <p>A choice of platforms to match your performance and/or price requirements</p> <p>A consistent set of features that don't add to the pricetag</p> <p>Cost-effective control of your infrastructure via open-standards manageability</p> <p>Integrated standards-based security features</p> <p>Available from leading OEMs</p> |

| What Do You Want to Do This Year? (continued) | | | |
|---|---|--|--|
| What you need to do | Key capabilities required | AMD processor-based servers | What these AMD processor-based servers deliver |
| Scale for future business growth | <p>The power and flexibility to be re-provisioned for other workloads</p> <p>Ability to cost-effectively handle enterprise collaboration and exchange applications</p> <p>Ability to consistently adapt to increases in workloads with continued thermal efficiency</p> <p>A top OEM brand with reputable support</p> | <p>Acer GR385 F1 rack server</p> <p>Acer GR585 F1 rack server</p> <p>Acer GW175hx F1 rack server</p> <p>Dell R715 rack server</p> <p>Dell R815 rack server</p> <p>HP BL465c G7 blade server</p> <p>HPBL685c G7 blade server</p> <p>HP DL165 G7 rack server</p> <p>HP DL385 G7 rack server</p> <p>HP DL585 G7 rack server</p> <p>HP SL165z G7 rack server</p> <p>IBM x3755 MB rack server</p> | <p>More cores/memory channels to scale with increases in business needs</p> <p>AMD continues to set the trend of increasing processor cores without adding a price premium, making it cost-efficient to buy with tomorrow's needs in mind</p> <p>AMD is committed to sustaining power- and thermal-efficiency even as business workloads grow</p> <p>Available from leading OEMs</p> |

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