Problem Solved.

Now Is the Time for 10GbE

Solve the problem of increased network demands and the growing need to support virtualization with 10GbE Intel® Ethernet.

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A recent survey conducted on behalf of Intel shows growing demand among IT professionals for increased network bandwidth and data center flexibility. In addition to this, modern business tools such as virtualization and cloud computing are driving markets to move from legacy Gigabit infrastructures to 10GbE. A deeper dive into the survey results will show that not only are IT managers and staff primed for 10GbE, but also that the opportunity is ripe to seize the initiative and offer 10GbE solutions to your customers.

Data Growth Accelerates

- **70%** of IT professionals say the amount of data that needs to be stored, backed-up, and made accessible is increasing.
- **45%** of IT professionals say the number of VMs per server is increasing.
- Network bandwidth is expected to grow by an average of **28%** within the next 12 months.

Organizations are engaging more users online, collecting more data to analyze, syncing more often with the cloud, and connecting more devices to the network than ever before. According to IDG, digital information will continue to grow worldwide, reaching 40 zettabytes by 2020.[1] **How will this affect your customers?**

Storing, analyzing, and accessing higher volumes of data creates new challenges for IT professionals and new headaches for IT managers. Legacy infrastructures fall short when it comes to the flexibility and scalability that organizations currently need to compete in the business world. And virtualization, while it offers the potential for greater efficiency and server utilization, creates more hurdles by placing new, more intensive demands on aging hardware. The network is becoming a major bottleneck in the system.

What IT Professionals Are Looking For

- **60%** want to boost data center agility with faster VM transfer, storage access, and backup.
- **56%** say they need 10GbE to support virtualization and cloud deployments.
- **45%** want to consolidate their 1GbE ports by moving to 10GbE.

New tools are available to businesses today: social, mobile, analytics, and cloud-based frameworks bring it all together. Organizations need a more robust network to support more than just intranet and email servers. For example, they need the ability to develop and deploy customer-facing applications, but legacy infrastructures often lack the flexibility and feature sets necessary to accomplish this.

As previously mentioned, virtualization offers many benefits but can also add complexity to a server configuration. When the number of VMs per physical server increases, bandwidth requirements also increase. Typical virtualized servers use eight to ten Gigabit LAN ports and two dedicated SAN ports. Deploying a 10GbE solution consolidates these ports by a 10:1 ratio, enabling data centers to ramp up network resources at 10GbE speed while reducing the number of ports and cables required.

What Vendors Can Offer

- **79%** of IT professionals say it is critically important that Ethernet products have a trusted reputation in the industry.
- **74%** say it is critically important that products are optimized for virtualization.
- **74%** say it is critically important that vendors offer products with backwards compatibility to ease the transition to 10GbE.

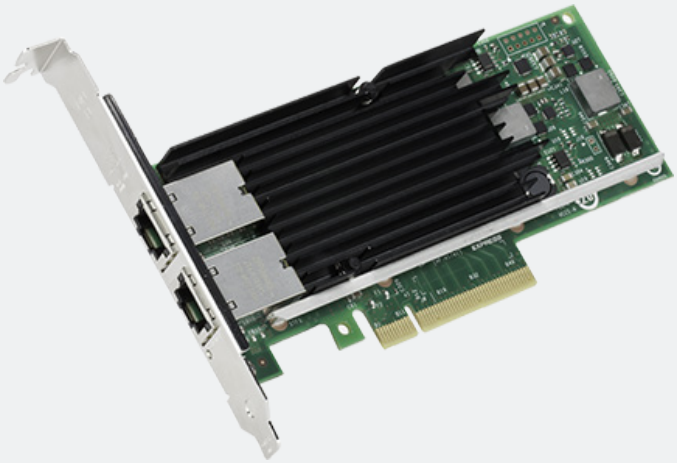
These points serve to reinforce the pattern we've seen so far: your customers are looking to incorporate 10GbE into their networks to better support virtualization. However, there are two noteworthy considerations here: First, IT professionals are looking for help to integrate 10GbE into their existing infrastructures with backwards compatibility; second, they want to do so with reputable Ethernet products.

Intel offers backwards-compatible Ethernet solutions, discussed in greater detail in the next section, to ease the transition to 10GbE. Also, Intel is recognized as an industry leader with over 30 years of experience in Ethernet. Intel server products undergo rigorous testing to ensure a proven, trusted solution. Simply put, Intel® Ethernet just works. And if hardware breaks down, Intel offers world-class support to help minimize downtime and ensure that vendors and end-customers keep up and running.

A Backwards-Compatible Solution

Your customers will find the 10GbE speed, easier manageability, and virtualization capabilities they're looking for with 10GBASE-T.

10GBASE-T uses the same copper twisted pair cables that are being used by many data centers today. Plus, switches and adapters are backwards compatible with Gigabit infrastructures, giving IT managers the flexibility to choose when they're ready for 10GbE. This means that IT staff can still rely on their knowledge and training in BASE-T, while enabling their data center to upgrade to 10GbE speeds. 10GBASE-T also supports cost-effective RJ45 connectors and flexible reach from 1 meter to 100 meters.



Intel® Ethernet Converged Network Adapter X540: 10GBASE-T simplifies the migration to 10GbE.

The 10GbE Intel® Ethernet Converged Network Adapter X540 supports 10GBASE-T deployments and offers many other virtualization features to strengthen your customers' private and hybrid cloud infrastructures. With this adapter, data centers can run a high amount of VMs per server and help remove bottlenecks from the network. This enables IT managers to get the most out of their hardware investments and press their business's competitive advantage.

What Adopters Are Saying

- **80%** of IT professionals have deployed 10GbE or plan to deploy within the next two years.
- **77%** report increased application performance from making the move to 10GbE.
- **67%** report that their infrastructures are simplified and easier to manage.

The benefits of deploying 10GbE are real. Adopters are demonstrating how the move to 10GbE delivers increased performance, network responsiveness and easier data center management. With the majority of IT professionals looking to adopt 10GbE, there is a growing demand for Ethernet resellers and service providers.

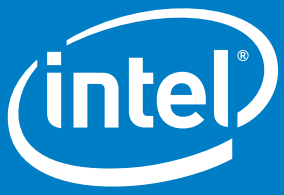
By offering 10GbE, not only will you help meet your customers' needs, but you can also take advantage of new opportunities to boost margins with bundled solutions. Your customers will need cables, switches, adapters, software, and additional hardware upgrades to complement the increased network throughput and scalability as their businesses grow.

Problem Solved with 10GbE Intel® Ethernet

IT professionals are voicing their need for a cost-effective way to meet the requirements of their data centers, and 10GbE is the solution. With 10GbE, data centers will be able to handle increasing bandwidth demands, prepare for future data growth, and boost data center agility with more VMs per server and the ability to consolidate existing hardware.

Help your customers plan and deploy a 10GbE solution today. Intel® Ethernet. It just works.

Learn more at www.intel.com/go/10gbe



Look Inside.™

"Market Pulse: 10GbE Adoption" survey conducted by IDG Research Services on behalf of Intel, March 2014. 10GbE Survey Methodology: The goal of this research was to determine the extent to which organizations have deployed, or plan to deploy, 10 Gigabit Ethernet (10GbE), as well as the adoption drivers, specific products/vendors in use, and potential benefits organizations have experienced or expect as a result of deploying 10GbE. Survey Duration: March 3-13, 2014. Audience Profile: InfoWorld and NetworkWorld readership. Qualifier: Have deployed or plan to deploy 10GbE. Respondent Characteristics: 183 qualified respondents; Titles: 63% IT/Network Management, 29% IT/Network Staff; Company Size: 26% 10,000+ employees, 26% less than 500 employees.

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1. "The Digital Universe in 2020: Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East." IDC, 2012. http://www.emc.com/collateral/analyst-reports/idc-the-digital-universe-in-2020.pdf