Intel IT Center

Modernize Your Data Center with Intel® Xeon® Processor E5 v3 Family and Windows Server* 2012 R2

Upgrade Before Windows Server 2003 End of Support

Older technology does more than just run slowly. Today, 32 percent of servers worldwide contribute only 4 percent of the total performance, but they use 65 percent of the total power.[1] As organizations move toward virtualization, cloud, and a more secure compliance environment, aging IT infrastructures are adding complexity and preventing the delivery of new and innovative services.

By upgrading to Intel® Xeon® processor E5 v3 family-based servers running the Windows Server 2012 R2 operating system, you can gain the breakthrough performance, flexibility, and speed you need to stay ahead.*

Upgrade Now to Minimize Risk

As of July 2015, support for Windows Server 2003 will end. Organizations who don't act now will be at risk, whether from compromised applications, data theft, or failure to meet regulatory requirements.

- **Compliance** – Failure to meet compliance requirements from HIPAA, Sarbanes-Oxley, PCI, and others can bring workflows to a halt.
- **Security** – Without security updates, physical and virtualized instances will be left vulnerable to threats, placing sensitive company data at risk.
- **Inefficiency** – Without standard patching, you'll be forced to maintain systems with custom support agreements. Ultimately, it will cost more to maintain old systems versus upgrading.

Gain Breakthrough Performance

By modernizing your IT environment with Windows Server 2012 R2 running on Intel Xeon processor E5 v3 family-based servers, you can maximize performance, security, and compliance.

The Intel Xeon processor E5 v3 family is optimized for large-scale data centers, with 3x more memory bandwidth with DDR4,[2, 3] up to 18 cores for increased parallelism,[2, 4] faster compression capabilities, and accelerated encryption that is twice as fast as previous generations.[2, 5] And Windows Server 2012 R2 is designed for enterprise-class scalability and security, as well as virtualization of compute, storage, and networking.

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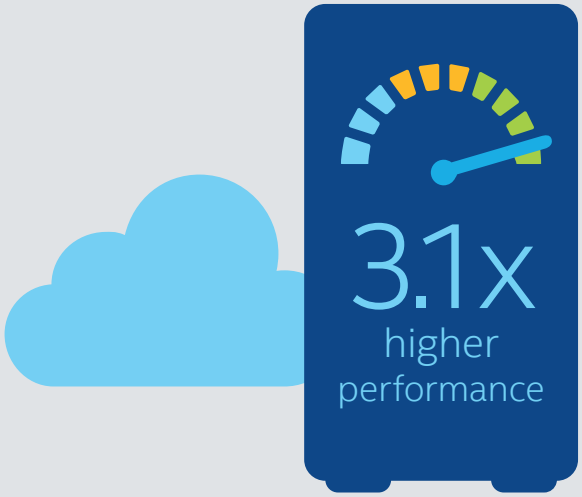
Powerful Scalability

Together, these industry-leading solutions provide a scalable IT foundation to help you gain business agility and set up your organization for an automated, flexible private cloud environment that delivers up to 3.1x higher performance,[2, 6, 7] with increased energy efficiency across all workloads.



Optimize for Cloud with the Microsoft* Azure* Platform

Choosing the best cloud service for your enterprise depends on a number of factors, from performance to security requirements and service-level expectations. With the right tools in place, it's easy to enable secure and reliable cloud services, whether you choose a private, public, or hybrid cloud model. The Azure* platform running on the latest Intel Xeon processor E5 family is a solution that is optimized for both cloud and the enterprise.

The Intel Xeon processor E5 family is built on industry standards that facilitate interoperability, cost-effective storage, advanced networking, and hardware-enhanced security. Integrated telemetry helps optimize costs across a hybrid infrastructure with fast, agile service delivery, while multiple pools of resources are easily connected for identifying the best "rent or buy" deployment model.

And the Azure platform is optimized for hybrid cloud with disaster recovery and capacity bursting capabilities, so you can quickly deliver the next generation of online services to reduce CapEx costs. You'll also gain added security from intrusion detection, denial-of-service attacks, and threats.

Windows* Azure* Pack

Install Windows* Azure* Pack within your private cloud for an optimal hybrid cloud experience. The Windows Azure Pack integrates with Microsoft* System Center and Windows Server* 2012 R2 to provide a self-service portal for managing services such as web sites, virtual machines (VMs), scalable web hosting, and more.

Get Started

Moving forward, Intel and Microsoft are committed to ongoing innovation for cloud solutions that are designed to optimize IT service delivery. As business continues to change and customer needs evolve, there will be even greater customization available in cloud services and solutions.

- Learn more about the Intel Xeon processor E5 v3 family and plan your cloud computing strategy with Intel IT Center resources.
- Explore the Windows Server 2003 migration resources and tools from Microsoft.

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*Other names and brands may be claimed as the property of others.

[1] Source: Intel analysis, 2012.

[2] Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests such as SYSmark* and MobileMark* are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.

[3] Source as of August 2014 TR#3044 on STREAM (triad): Supermicro* X8DTN+ platform with two Intel Xeon processor X5680, 18 x 8 GB DDR3-800 score: 26.5 GB/sec. New configuration: Intel Server System R2208WTTYS with two Intel Xeon processor E5-2699 v3, 24 x 16 GB DDR4-2133 @ 1600MHz DR-RDIMM, score: 85.2 GB/sec.

[4] Intel Xeon processor E5-2699 v3 (18C, 45M cache) compared to Intel Xeon processor E5-2697 v2 (12C, 30M cache).

[5] No computer system can provide absolute security. Requires an enabled Intel processor and software optimized for use of the technology. Consult your system manufacturer and/or software vendor for more information.

[6] Intel does not control or audit the design or implementation of third-party benchmark data or web sites referenced in this document. Intel encourages all of its customers to visit the referenced web sites or others where similar performance benchmark data are reported and confirm whether the referenced benchmark data are accurate and reflect performance of systems available for purchase.

[7] Source as of September 8, 2014. New configuration: Hewlett-Packard Company HP* ProLiant* ML350 Gen9 platform with two Intel Xeon processor E5-2699 v3, Oracle* Java* Standard Edition 8 update 11, 190,674 SPECjbb* 2013-MultiJVM max-jOPS, 47,139 SPECjbb 2013-MultiJVM critical-jOPS. Source. Baseline: Cisco Systems* Cisco UCS* C240 M3 platform with two Intel Xeon processor E5-2697 v2, Oracle Java Standard Edition 7 update 45, 63,079 SPECjbb 2013-MultiJVM max-jOPS , 23,797 SPECjbb 2013-MultiJVM critical-jOPS. Source.

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