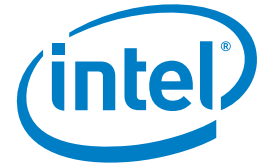


## SOLUTION BRIEF

Intel® Xeon® Processor E5 and E7 Families

Data Center Efficiency  
Server Performance



# Refreshing for Greater Performance

HP helps customers create more powerful and efficient server fleets by consolidating on Intel® technology



“Intel® Xeon® processors E5 and E7 families enable us to reduce the number of physical servers we deploy while increasing our customers’ computing performance capabilities. This means that our customers can continue to run highly demanding workloads now and in the future, without any negative impact on the end user.”

*Jiri Lepka*  
x86 Server Product Manager  
HP

## Challenges

- **Demonstrate leadership.** As an IT industry leader, HP is committed to helping its customers use technology innovations to their advantage
- **Challenge the ordinary.** Transform standard IT tasks, such as server refresh, into value-driving projects

## Solutions

- **Performance first.** HP servers powered by Intel® Xeon® processors E5 and E7 families deliver strong compute power
- **Virtualized efficiency.** Intel® Virtualization Technology (Intel® VT) more than doubles native virtualization performance and reduces virtualization latency by 40 percent<sup>1</sup>

## Business Value

- **Hosting consolidation.** Gigant Group consolidated the hosted customer environment from 15 to four servers, cutting server operations costs by 67 percent
- **Recruitment efficiency.** Grafton Recruitment reduced hardware for simpler management while boosting compute power
- **Scalable banking.** Komerčni Banka created a more flexible and scalable server environment supported by technologies from HP and Intel

## Innovating the Ordinary

These days, IT is a key success factor for many organizations. The right tools can deliver significant advantages in productivity, cost efficiency and business performance. HP keeps a commitment to focused innovation at the heart of everything it does, making sure that its own position as an industry leader can help customers benefit from the latest solutions and technologies.

This is true of any initiative HP undertakes, even traditional projects like server refresh. It believes that although replacing old servers is a job familiar to most IT departments, there is no reason innovation should not play an important role.

“It’s not just about replacing aging servers with newer ones,” explains Jiri Lepka, x86 server product manager, HP. “We want to give our customers’ technology environments a large boost in terms of performance, flexibility and cost effectiveness every time they implement new hardware.”

This boost can be delivered in a number of ways, but the priorities HP addresses with its server refresh customers include:

- Consolidating the server fleet to make it easier to manage
- Increasing the fleet’s performance, even when it is consolidated, to create greater efficiencies and lower costs
- Introducing virtualization to make more efficient use of the available server resources and enable greater responsiveness to user demands

## Virtualized Performance

“We believe that to provide our customers with the most efficient and reliable consolidated server fleet, we need to include Intel® technology,” says Lepka. “The latest generation of the Intel Xeon processor E5 and E7 families, with multiple cores, enables us to reduce the number of physical servers we deploy while increasing our customers’ computing performance capabilities. The superior performance of these processors means that our customers can continue to run highly demanding workloads now and in the future, with little negative impact on the end user.”

By using the Intel Xeon processor E5 and E7 families in the servers it deploys, HP can tie its customers’ virtualization capabilities to the CPU. This delivers greater benefits, including accelerating fundamental virtualization processes, reducing latency and improving short- and long-term value from software and server investments.

Virtualization-supporting technologies are built into the processors. For example Intel® VT enables better performance, increases user uptime and business continuity, and acts as a foundation for trust and compliance with advanced security features. It can enhance native virtualization performance by up to 2.1 times and reduce roundtrip virtualization latency by 40 percent. Meanwhile, Intel® Virtualization Technology FlexMigration (Intel® VT FlexMigration) takes the migration concept a step further, allowing live migration of virtual machines across multiple generations of Intel Xeon processor-based servers.



## HP uses Intel® technology to deliver performance, efficiency and scalability through server consolidation

HP now recommends Intel technology-based servers to its server refresh customers, regardless of the platform they already have in place. In this way, it has helped organizations in diverse industries to realize the benefits of server consolidation and virtualization.

### Power for the Cloud

One of the leading providers of hosting and cloud services in the Czech Republic, Gigant Group had a software provider customer that wanted to refresh the obsolete servers supporting its revenue-generating applications. Its key objectives for this customer were to reduce its operating costs, particularly around technical support and administration, while maintaining high application availability.

HP worked with the customer to replace 15 old servers with a virtualized environment running on just four HP DL380p\* servers powered by Intel Xeon processors E5-2670. The processors came equipped with Intel® Hyper-Threading Technology, making 128 high-performance cores available to support a virtualized environment run using Microsoft Hyper-V Server\*.

“Despite consolidating our fleet from 15 servers to four, we saw a 40 percent increase in processing

power with the new platform,” says Petr Suchanek, CIO, Gigant Group. “The cost of our server operations went down by 67 percent thanks to the lower power consumption of the Intel technology-powered servers, while the addition of the virtualization software has cut server management costs by 54 percent.” This has all been achieved while ensuring near 100 percent application availability for Gigant Group’s customer’s end users.

### Recruitment Efficiency

Grafton Recruitment is an international recruitment company with offices in 30 countries worldwide and a strong presence in the Czech Republic. Its server infrastructure, used to support all business applications, was reaching the end of its life, so the company wanted to replace its fleet with one that would deliver better performance and reliability.

Grafton Recruitment replaced its existing servers in the Czech Republic with 12 HP DL360p\* Gen8 servers powered by the Intel Xeon processor E5 family. As a result, it achieved higher compute power along with the improved flexibility of a virtualized environment. “We’re pleased with the energy efficiency, virtualization support and performance of our new server environment,” says Zdenek Bajer, ICT Manager, Grafton Recruitment. “The fleet is much easier to manage than before and we’ve seen some strong cost savings as well.”

### Banking on Efficient Growth

As the Czech arm of Societe Générale, Komerční Banka is one of the leading banking institutions in Central and Eastern Europe. It enlisted HP’s support to refresh its old hardware so that it could better support its most important customer-facing applications with increased computing perform-

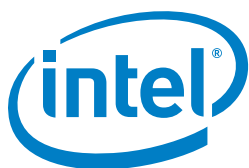
### Lessons learned

Every organization is different, but many face similar challenges when it comes to getting the most out of their IT investments. The trick is identifying the company’s top priorities and then making use of the latest innovations in virtualization, computing performance and energy efficiency to match them to meet the challenges at hand. HP works closely with its customers to empower them with the right servers and Intel technologies that transform the server refresh from a necessary task to a driver of significant IT and business advantage.

ance. It needed to increase the scalability of its server fleet as well, to enable easy business growth in the future.

“With HP’s help, we migrated to an x86 platform, implementing 16 HP DL380p Gen8 servers with the Intel Xeon processor E5 family,” explains Jiri Sladky, solution architect, Komerční Banka. “We now enjoy greater performance and scalability than we had before, as well as a higher level of consolidation for our VMware and Citrix environments. Thanks to the consolidation of our hardware resources and reduced power consumption, we have also reduced our energy consumption and spending.”

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<sup>1</sup> 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.

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