OPTIMIZE YOUR IT INFRASTRUCTURE WITH 2ND GEN INTEL® XEON® SCALABLE PROCESSORS TELESALES GUIDE

How to use

Use this script to educate prospective new server buyers about the business value to be gained by upgrading their IT infrastructure with 2nd Gen Intel® Xeon® Scalable processors. These new hardware solutions offer new features and capabilities and deliver maximum benefit when used together with modern software solutions

Call opening

"Are you considering purchasing a new server? Are you aware of the significant performance and TCO improvements on Intel® Xeon® processor-based solutions vs. 5 years ago? Are you aware of all the improvements in running AI solutions optimized for Intel Xeon Scalable processors, can offer? I'd like to discuss the advantages to you of running modern solutions on modern hardware."

Opening questions

Are you effectively using all of the data your Enterprise is creating?

A recent Forbes indicated 90% of the world's data was created in past two years but only about 2% of it is being used. [1]

Across the major customer segments, and industries worldwide, the urgency to make better use and impact of data has never been greater.

Each of the major infrastructure providers experience various challenges as they seek to evolve themselves to service this new data centric world – from edge to cloud and back.

Intel has built a full portfolio to deliver performance, security and agility removing bottlenecks across the data-centric system

This will fuel the build out of a cost-efficient, flexible, and scalable multi-cloud world.

Only Intel delivers a common infrastructure, everywhere, from the heart of the data center to the multi-cloud edge, and back.

I am excited to discuss the next wave of data centric innovation with you.

Do you have the performance to propel insights?

New second gen Intel® Xeon® Scalable processors deliver outstanding improvements in performance, whether investing in new infrastructure or refreshing to the latest generation.

2012 doesn't feel that long ago, but with up-to 3.5X performance improvement, second generation Intel Xeon Scalable processors bring transformational upgrades to dated infrastructure.

With up-to 1.33X performance improvements, compared to Intel Xeon Scalable processors just introduced in 2017.[2]

Is the cost and limited capacities of memory preventing efficiencies and growth?

Traditional memory just doesn't get to the capacities needed for in-memory database and certain memory-demanding workload applications.

When deployed, Intel® Optane™ DC Persistent Memory can help improve TCO via not just memory savings, but broadly via reduced SW licensing costs, node reduction, power efficiencies and other operational efficiencies. You will benefit the most from this ground breaking product if using larger capacities (>512GB) running key workloads such as in-memory database, analytics, large numbers of VMs/containers where CPUs are under utilized.

Sources and benchmark data available on page 3.

Understand the Blockers

We are not certain we can afford a big up-front investment in new IT infrastructure.

The “technical debt” organizations incur through the sprawl of legacy hardware infrastructure is significant. These hidden legacy infrastructure costs, incurred long after the hardware has been amortized, can come in the form of ongoing maintenance, unplanned outages resulting in employee downtime, sub-optimal developer productivity, and increased risk to the business from expanding footprint of online threats that legacy hardware isn’t designed to address. IT organizations that have initiated aggressive modernization efforts in support of broader digital transformation initiatives driven by the C-Suite are already seeing the early payoff.

We have not had the time or resources to research what configurations would best fit our specific circumstances.

Intel® Select Solutions are pre-configured, benchmark-tested and verified, workload-optimized solutions that make it easy for you to deploy and build your infrastructure with confidence. Options include Intel Select Solutions for Analytics, AI, Hybrid Cloud, Network transformation and HPC workloads. Intel has almost 30 solutions that are in our solution lifecycle and will be announced this year

Underscore the benefits of 2nd Gen Intel® Xeon® Scalable platforms

Performance to propel insights	Intel’s industry leading, workload optimized platform with built in AI acceleration, provides the seamless performance foundation for the data centric era, from the multi-cloud to intelligent edge, and back.
Business Resilience	Intel has long delivered hardware-enhanced security to thwart malicious exploits and maintain workload integrity, with reduced performance overhead. Businesses need to provide trusted service delivery w/ high availability and encryption efficiency at rest, in use and in flight.
Agile Service Delivery	Intel® platform innovations constantly seek to enhance utilization and enhance virtualization across compute, network, storage while consistently delivering amazing experiences, whether business-to-business or business-to-consumer.

1. Source: https://www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/
2. Performance results are based on testing as of dates shown in configuration and may not reflect all publicly available security updates. See configuration disclosure for details. No product or component can be absolutely secure. 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. For more complete information visit www.intel.com/benchmarks. Up to 3.50X 5-Year Refresh Performance Improvement VM density compared to Intel® Xeon® E5-2600 v6 processor: 1-node, 2x E5-2697 v2 on Canon Pass with 256 GB (16 slots / 16GB / 1600) total memory, ucode 0x42c on RHEL7.6, 3.10.0-957.el7.x86_65, 1x Intel 400GB SSD OS Drive, 2x P4500 4TB PCIe, 2*82599 dual port Ethernet, Virtualization Benchmark, VM kernel 4.19, HT on, Turbo on, score: VM density=74, test by Intel on 1/15/2019. vs. 1-node, 2x 8280 on Wolf Pass with 768 GB (24 slots / 32GB / 2666) total memory, ucode 0x2000056 on RHEL7.6, 3.10.0-957.el7.x86_65, 1x Intel 400GB SSD OS Drive, 2x P4500 4TB PCIe, 2*82599 dual port Ethernet, Virtualization Benchmark, VM kernel 4.19, HT on, Turbo on, score: VM density=21, test by Intel on 1/15/2019. 1.33X Average Performance Improvement compared to Intel® Xeon® Gold 5100 Processor: Geomean of est SPECrate2017_int_base, est SPECrate2017_fp_base, Stream Triad, Intel Distribution of Linpack, server side Java. Gold 5218 vs Gold 5118: 1-node, 2x Intel® Xeon® Gold 5218 cpu on Wolf Pass with 384 GB (12 X 32GB 2933 (2666)) total memory, ucode 0x4000013 on RHEL7.6, 3.10.0-957.el7.x86_65, IC18u2, AVX2, HT on all (off Stream, Linpack), Turbo on, result: est int throughput=162, est fp throughput=172, Stream Triad=185, Linpack=1088, server side java=98333, test by Intel on 12/7/2018. 1-node, 2x Intel® Xeon® Gold 5118 cpu on Wolf Pass with 384 GB (12 X 32GB 2666 (2400)) total memory, ucode 0x200004D on RHEL7.6, 3.10.0-957.el7.x86_65, IC18u2, AVX2, HT on all (off Stream, Linpack), Turbo on, result: est int throughput=119, est fp throughput=134, Stream Triad=148.6, Linpack=822, server side java=67434, test by Intel on 11/12/2018.

The benchmark results may need to be revised as additional testing is conducted. The results depend on the specific platform configurations and workloads utilized in the testing, and may not be applicable to any particular user's components, computer system or workloads. The results are not necessarily representative of other benchmarks and other benchmark results may show greater or lesser impact from mitigations. Intel does not control or audit third-party benchmark data or the web sites referenced in this document. You should visit the referenced website and confirm whether referenced data are accurate.

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. No computer system can be absolutely secure.

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. For more complete information about performance and benchmark results, visit http://www.intel.com/benchmarks.

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. For more complete information visit http://www.intel.com/benchmarks.