

No Cost Intel Skylake-SP Trial Now Available on Nor-Tech's Demo Cluster



Nor-Tech just announced the integration of Intel Skylake-SP, running on the Purley platform, into Nor-Tech's leading-edge demo cluster.

We are very enthusiastic about this product. We look forward to working with our current clients and potential clients to quantify these gains for their organizations on our demo cluster.”— Nor-Tech President and CEO David Bollig

MINNEAPOLIS, MINN., UNITED STATES, July 6, 2017 Nor-Tech, the leading experts on Linux-based high-performance technology solutions, just announced the integration of Intel Skylake-SP, running on the Purley platform, into Nor-Tech's leading-edge demo cluster. Skylake-SP is the Intel tag for the Intel Xeon processor Scalable family.

The demo cluster is available to clients and non-clients at no-cost to test drive the latest HPC cluster software and hardware before they commit. The world's leading cluster hardware providers, such as Intel, leverage Nor-Tech's demo cluster to show just how valuable their latest products, such as Skylake-SP, are when integrated into Nor-Tech's high performance technology.

A major global NSF-funded research institution has been working with Nor-Tech for the past six weeks to test Skylake-SP prior to the official rollout.

Nor-Tech President and CEO David Bollig said, “So far they have seen some very nice gains in terms of performance, higher fidelity modeling, and the ability to run more jobs per day. We expect that those who take advantage of our demo cluster will get similar results.”

Skylake-SP is an especially good fit for datacenter applications such as HPC data analytics and virtualization.” Purley is Intel's code name for the combined Xeon E5 and Xeon E7 platform. It scales from two sockets to four to eight without requiring third party chipsets. The Intel Xeon processor scalable family features:

- Intel Advanced Vector Extension 512 (Intel AVX-512): Intel AVX-512 extensions can deliver an up to 2x flops per clock-cycle peak performance capability increase (over AVX2), especially important for HPC, data analytics, and security/cryptography workloads.
- Intel Omni-Path Architecture (Intel OPA): Accelerated I/O. Fabric.
- Intel QuickAssit Technology (Intel QAT): Hardware-enhanced security (crypto) and data compression offload. This is available as an integrated option.
- Intel Volume Management Devices (Intel VMD): Greater agility/efficiency for NVMe storage (eg Intel Optane SSD DC P4800X/Intel SSD DC 4600)
- Intel Ethernet: integrated.
- Advanced RAS: reliability, availability and serviceability.

Intel Xeon processor scalable family supports:

- SSDs: Intel Optane SSD DC P4800X, Intel SSD DC 4500, Intel SSD DC 4600 families

• Accelerators: Intel FPGA, Intel Nervana, Intel Xeon Phi processor/co-processor, Intel Silicon Photonics

Examples of workload optimized frameworks and telemetry for the Intel Xeon processor scalable family include:

- Caffe*, Intel Data Analytics Acceleration Library (Intel DAAL), Intel Math Kernel Library (Intel MLK), Data Plane Development Kit (DPDK), Intel SNAP, Storage Performance Development Kit (SPDK)

Reported performance improvements include:

- Up to 1.59x higher performance running in-memory SAP HANA workloads over the generation it replaces.
- SAP HANA certified to support up to 6x greater system memory on the new Intel platform for 4- or 8- socket configurations over the representative installed base of systems available four years ago.
- Up to 3.9x higher virtualized throughput and more VMs/server vs. Intel® Xeon® processor E5 performance estimate based on virtualization infrastructure consolidation workload.

More information about the Demo Cluster is available at: <http://www.nor-tech.com/solutions/hpc/demo-cluster/>.

Nor-Tech is on CRN's list of the top 40 Data Center Infrastructure Providers—joining ranks with IBM, Dell, Hewlett Packard Enterprise, and Lenovo. The company is renowned throughout the scientific, academic, and business communities for easy to deploy turnkey clusters and expert, no wait time support. All of Nor-Tech's technology is made by Nor-Tech in Minnesota and supported by Nor-Tech around the world. In addition to HPC clusters, Nor-Tech's custom technology includes workstations, desktops, and servers for a range of applications including CAE, CFD, and FEA. Nor-Tech engineers average 20+ years of experience and are responsible for significant high performance computing innovations. To contact Nor-Tech call 952-808-1000/toll free: 877-808-1010 or visit <http://www.nor-tech.com>.