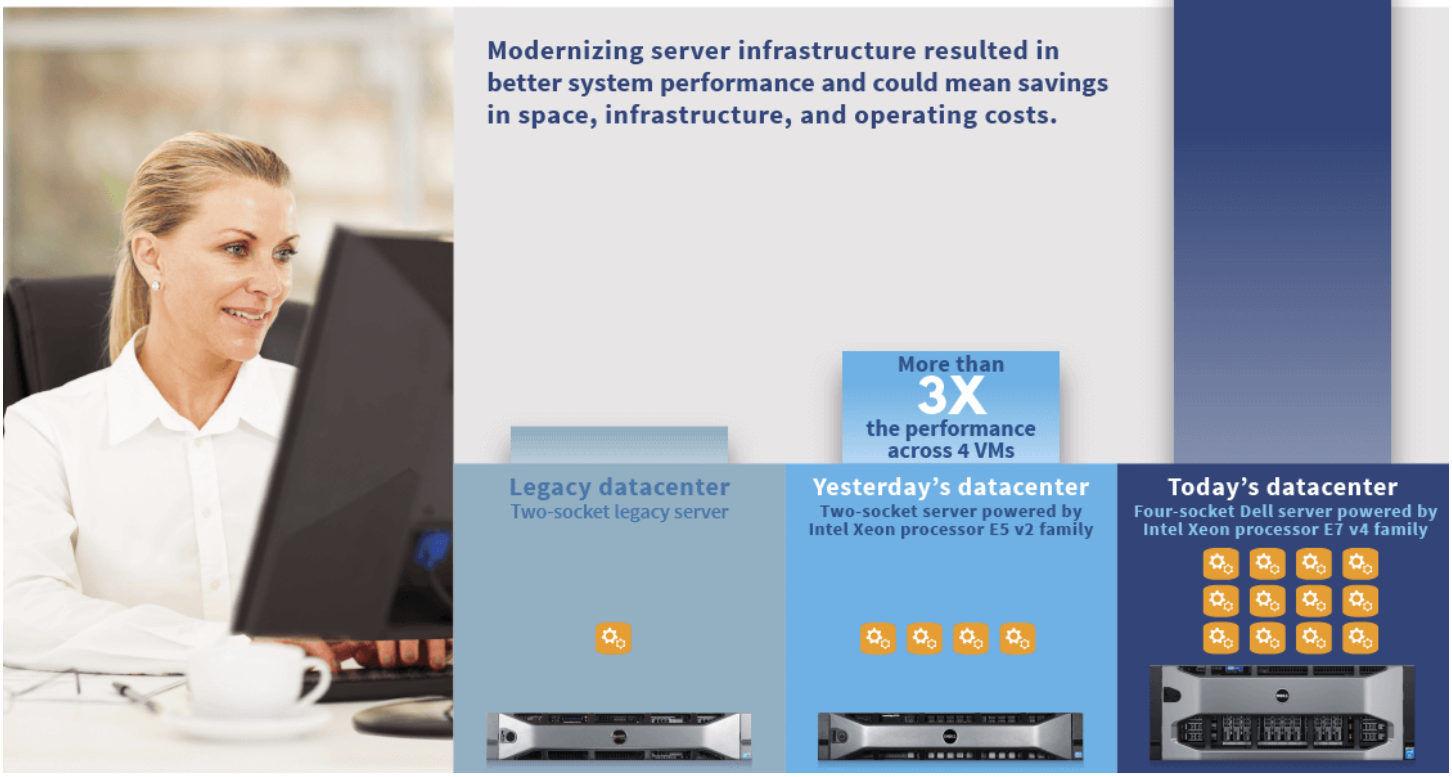
COMPLETE MORE SAS® 9.4 WORKLOADS FASTER WITH SERVERS POWERED BY THE INTEL® XEON® E7 V4 PROCESSOR FAMILY AND THE INTEL® SSD DATACENTER FAMILY

SIMPLIFY, SAVE, & DO MORE

Modernize your datacenter by consolidating the SAS workloads of your legacy servers onto next-generation Intel Xeon processor-powered servers



By modernizing your datacenter, your business can continue to run your current SAS workloads while providing high-performance infrastructure for SAS in-memory visualization and analytics.

Is an outdated datacenter holding back your business and the performance of your SAS software? It might be time for new systems, which can modernize and simplify through consolidation and upgraded hardware that does many times the work of older servers.

One excellent option is to virtualize bare-metal legacy servers onto a newer platform powered by Intel Xeon E7 v4 processors, which is ideal for SAS in-memory visualization and advanced analytics. This newer technology helps create a modernized datacenter that delivers more SAS workload performance, uses less space and resources, and offers shorter response times.

Compared to a legacy server, a server powered by Intel Xeon E7-8890 v4 processors with Intel SSD DC P3700 Series for PCIe® delivered more relative performance, required less time to complete SAS jobs, and completed more of those jobs per hour on average.

JUNE 2016
A PRINCIPLED TECHNOLOGIES SUMMARY
Commissioned by SAS

SAVING WITH MODERNIZATION

Simply put, virtualizing on a four-socket server powered by Intel Xeon E7-8890 v4 processors results in more SAS jobs done simultaneously in less physical space. That means your business could consolidate legacy two-socket servers in your datacenter and run more SAS jobs. Consolidating physical hardware typically provides advantages such as:

- Reduced power and cooling requirements
- Smaller physical footprints from fewer required racks and servers, which reduces space-related costs
- Lower management costs due to fewer physical servers to manage
- Fewer resources wasted as a result of underutilized hardware

One newer four-socket server powered by Intel Xeon E7 v4 processors delivered 17 times the SAS workload performance of the legacy server (see Figure 1). This performance calculation uses the average time to complete the workload to compare the work of each VM.

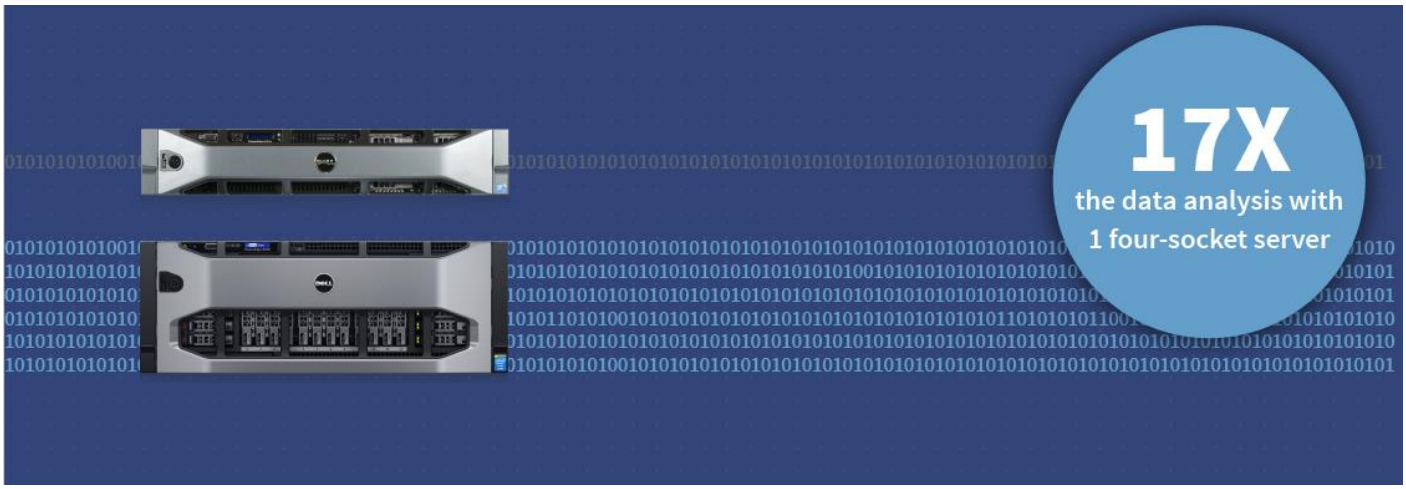


Figure 1: Consolidating workloads is a key to modernization.

SUPPORTING PROCESSOR PERFORMANCE WITH INTEL SSD STORAGE

The updated Intel storage technology in four-socket servers make them well suited to support large-volume, complex data analytics software such as those from SAS. The legacy server's hard disk drives (HDDs) supported only a small fraction of the disk throughput that we achieved with the Intel SSD DC P3700 Series for PCIe solid-state drives (SSDs) featured in the four-socket server powered by Intel Xeon E7 v4 processors (see Figure 2). By upgrading your legacy servers with HDDs to newer servers with PCIe SSDs, your business could see significant benefits:

- Get SAS data sooner and have more time to analyze the data
- Save on management time by having fewer servers to maintain
- Reduce waste by utilizing processor and memory resources more effectively

Figure 2: The peak disk throughput in GB per second for each solution. Larger numbers are better.

[1] For detailed information on our testing, environment, and results, see the full Principled Technologies report at www.principledtechnologies.com/SAS/SAS_Intel_E7v4_0716.pdf.

ABOUT PRINCIPLED TECHNOLOGIES

Principled Technologies, Inc.
1007 Slater Road, Suite 300
Durham, NC, 27703
www.principledtechnologies.com

We provide industry-leading technology assessment and fact-based marketing services. We bring to every assignment extensive experience with and expertise in all aspects of technology testing and analysis, from researching new technologies, to developing new methodologies, to testing with existing and new tools.

When the assessment is complete, we know how to present the results to a broad range of target audiences. We provide our clients with the materials they need, from market-focused data to use in their own collateral to custom sales aids, such as test reports, performance assessments, and white papers. Every document reflects the results of our trusted independent analysis.

We provide customized services that focus on our clients' individual requirements. Whether the technology involves hardware, software, Web sites, or services, we offer the experience, expertise, and tools to help our clients assess how it will fare against its competition, its performance, its market readiness, and its quality and reliability.

Our founders, Mark L. Van Name and Bill Catchings, have worked together in technology assessment for over 20 years. As journalists, they published over a thousand articles on a wide array of technology subjects. They created and led the Ziff-Davis Benchmark Operation, which developed such industry-standard benchmarks as Ziff Davis Media's Winstone and WebBench. They founded and led eTesting Labs, and after the acquisition of that company by Lionbridge Technologies were the head and CTO of VeriTest.