Improve Performance by up to 1.61x and Container Scaling by 5.1x on Containerized Splunk® Enterprise Enabled by 3rd Generation Intel® Xeon® Scalable Processors

Splunk

Better containers performance scaling

4.8x better indexing performance scaling containers

5.1x better Search performance scaling containers

Better gen-over-gen performance

1.27x Better Performance for Indexing Intensive, Medium-search workloads

1.61x Better Performance for Search-Intensive, Medium-indexing workloads

1.58x better Splunk Containers performance

Compared to the previous generation, bare-metal clusters with 3rd Gen Intel® Xeon® Scalable processors improve Splunk indexing, searching, and container scaling

Organizations employing on-prem clusters to collect and process the machine-generated data that comes from sensors and IoT devices can improve Splunk® Enterprise performance and reach actionable insight sooner by choosing server nodes that employ the latest technology. Whether you run Splunk workloads bare metal or in containers, tests show that selecting clusters built on 3rd Gen Intel® Xeon® Scalable processors (Intel Xeon Platinum 8360Y) provide better scaling, indexing, and search performance for Splunk Enterprise workloads than clusters using 2nd Gen Intel Xeon processors. The architectural enhancements in 3rd Gen Intel Xeon Scalable processors make them ideal for ingesting and analyzing massive quantities of real-time processed or machine-generated data.

A five-node cluster featuring 3rd Gen Intel Xeon Scalable processors delivered up to 1.61x better Splunk performance on a Search-Intensive Medium-indexing workload compared to a cluster with previous-gen processors. In testing using Splunk Containers, the 3rd Gen Intel Xeon processor-enabled cluster provided 5.1x better search performance scaling containers. By enabling your infrastructure to sort through more data, faster, your organization can get faster and smarter insights, improve application performance monitoring to quickly identify security threats, and more.

Improve Containers Scaling with Containerized Splunk on 3rd Gen Intel Xeon Scalable Processors

By selecting a validated, workload-optimized Intel + Splunk Container-Ready Solution, you can improve container performance scaling. As Figure 1 shows, an Intel + Splunk Container-Ready Solution enabled by 3rd Gen Intel Xeon Scalable processors hosted up to 5.1x the search performance containers and up to 4.8x the indexing performance containers of a minimum Splunk cluster configuration. Seamless scalability can help your organization better plan to accommodate users as your business continues to grow.

Splunk container scaling with 3rd Gen Intel processors

Relative number of containers supported | Higher is better

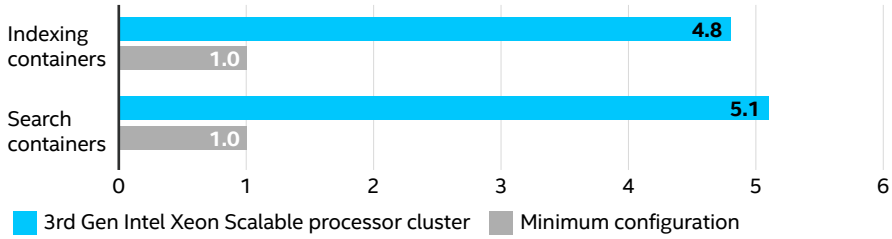

Figure 1. Relative results showing Splunk Containers Scaling Performance.

Boost Performance Significantly Over the Previous Generation

Selecting a solution built on the latest processor technology can speed your time to insight over clusters with previous-generation hardware.

As Figure 2 shows, a five-node cluster enabled by 3rd Gen Intel® Xeon® Scalable processors delivered 1.61x better search-intensive performance and 1.27x better indexing-intensive performance for Splunk workloads than a five-node cluster with older processors.

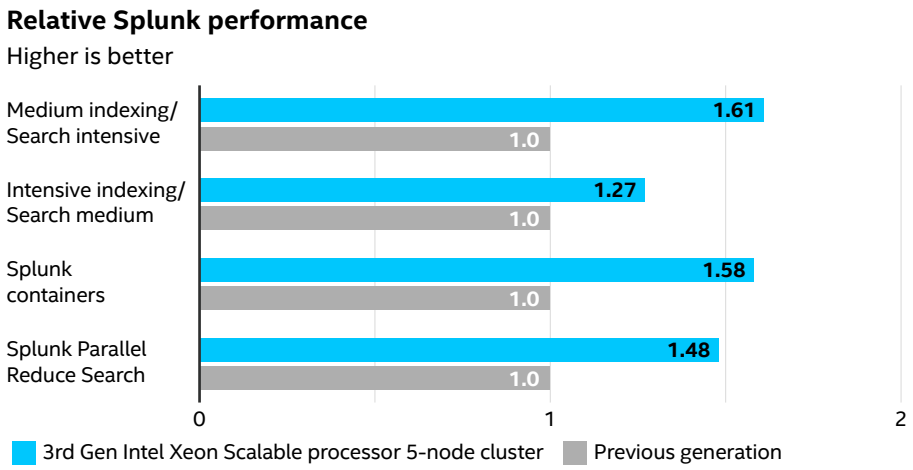

Figure 2. Relative gen-over-gen Splunk performance for five-node clusters with different processor configurations

Additionally, Containerized Splunk featuring 3rd Gen Intel Xeon Scalable processors delivered 1.58x better performance on Splunk Containers than did the previous-generation hardware. The new solution also offered 1.48x better Splunk Parallel Reduce Search performance, which could increase productivity by handling a larger amount of data, faster.

For organizations with large amounts of machine-generated data, selecting a new Containerized Splunk solution featuring 3rd Gen Intel Xeon Scalable processors over previous-gen hardware can vastly improve time to insight for bare-metal or containerized workloads and ensure smooth container scaling to accommodate growing business and technology needs.

Learn More

To begin running your Splunk workloads Intel+ Splunk Container-Ready Solutions featuring 3rd Gen Intel Xeon Scalable processors, visit https://www.intel.com/content/www/us/en/architecture-and-technology/intel-select-solutions-overview.html.

For testing details, visit http://www.intel.com/3gen-xeon-config and see claims [108], [110], [111], [112], and [124].

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