



IT Operations Analytics on Cisco UCS with Splunk Enterprise

IT operations have never been more complex—or more critical to the missions of the enterprises they serve. Most IT infrastructure has been built over time and consists of a wide variety of networks, computing platforms, operating systems, storage resources, and applications from multiple vendors. This diverse infrastructure has a significant drawback: management complexity. To try to keep operations running smoothly, each group within the IT department relies on vendor-specific solutions to monitor and manage its specific element of the infrastructure. But this siloed approach cannot scale to support increased mobility and connectivity, process ever-increasing amounts of data, and deliver consistently high performance for a growing number of mission-critical business applications. And in the era of the Internet of Everything (IoE), massive and easy scalability is essential.

And even as IT infrastructure expands and becomes more complex, IT departments remain accountable for helping ensure that all applications and elements of the infrastructure work flawlessly and together.

To meet increasing expectations, IT needs a solution that:

- Efficiently bridges existing separate management domains, proactively monitoring IT operations in real time across the entire infrastructure and application environment
- Immediately identifies and resolves problems so that IT can meet service-level agreements (SLAs) and deliver services predictably
- Instantly adapts to the changing infrastructure environment and delivers fast response times even as data volumes and analytics use cases increase and the number of users grows

Cisco and Splunk provide a comprehensive, highly efficient IT operations analytics solution. This solution helps enterprises increase the performance of all their applications and infrastructure by combining powerful analytics functions with comprehensive single-pane visibility and outstanding scalability and performance at a low total cost of ownership (TCO).

Highlights

- Increase application and infrastructure performance by providing real-time, end-to-end, single-pane visibility across applications and physical, virtual, and cloud infrastructure.
- Improve IT productivity with comprehensive IT analytics and management functions, including proactive infrastructure monitoring, incident management, problem management, and capacity management.
- Deliver consistent performance and real-time operations visibility even as the volume of data and the number of users and use cases increases.
- Enable fast and massive scalability to keep pace with the rapid growth of data and users across the organization.
- Reduce software and management costs and maintain a low infrastructure total cost of ownership (TCO).

Cisco and Splunk: Combining powerful analytics, comprehensive infrastructure visibility with outstanding scalability and performance.





Full Operational Visibility Enables a Proactive, Predictive Approach to IT

The IT Operations Analytics solution on the Cisco Unified Computing System™ (Cisco UCS®) with Splunk Enterprise is based on leading analytics software and hardware platforms.

Splunk Enterprise is the industry-leading platform for machine data. It provides a fast, easy, and secure way to analyze the massive streams of machine data generated by IT systems. Advantages include:

- End-to-end IT operations visibility across application, user, and infrastructure information: Splunk collects and indexes data in real time. It then allows you to correlate events and display insights using powerful search, analysis, and visualization capabilities.
- Improved IT productivity through comprehensive management functions: Splunk supports proactive monitoring, incident and problem management, capacity management, and more. It accelerates problem identification and reduces repair times.

Cisco UCS is a powerful and efficient foundation for initial Splunk analytics software deployments and for your long-term requirements as analytics use cases become more pervasive in your organization:

- Industry-leading scalability becomes essential as organizations add new data sources and use cases and increase data retention periods to meet compliance requirements. The Cisco UCS portfolio can scale up to 10,000 servers, so enterprises can be confident that they can support and scale their analytics workloads and data volumes.
- Cisco UCS delivers outstanding and predictable performance for Splunk at scale. As use of Splunk expands, delivery of consistent, split-second performance is more critical than ever to support increasingly large numbers of complex searches and simultaneous Splunk users. Cisco UCS offers industry-leading performance that has been proven in more than 100 world-record benchmarks, including the TPCx-HS benchmark for big data performance. In real-world Splunk environments, Cisco UCS has delivered outstanding performance for demanding, large-scale environments with thousands of simultaneous searches.

And together, Splunk Enterprise and Cisco deliver exceptional business value. Splunk helps customers significantly decrease system incidents—by 15 to 45 percent—investigate system incidents 70 to 95 percent more quickly, and reduce the financial impact of outages by 67 to 82 percent. The Cisco UCS platform's integrated design and management automation help reduce the need for cables and switches by 77 percent, power and cooling costs by 54 percent, and management costs by 61 percent compared with the requirements for traditional servers.

It's easy to get started.

To accelerate solution deployment and reduce risk, Cisco has worked closely with Splunk engineers to create [a new, in-depth Cisco® Validated Design](#). These designs provide all the information you need to deploy a Splunk analytics software solution on Cisco UCS. Cisco has created a pre-tested Distributed Deployment with High-Capacity configuration of Cisco UCS Integrated Infrastructure that is optimized for Splunk Enterprise—making it easy to order exactly what you need to get started. Get started today: go to splunk.com to download a free version of Splunk Enterprise.