Cloud Complexity Challenges

Organizations are in the midst of their cloud journey — moving workloads that run on-premises to private, public and hybrid clouds. While cloud adoption brings a wide range of benefits, it also creates complexity and unchartered challenges. New infrastructure technologies like cloud, containers and Kubernetes spin up and down in seconds, making it difficult for IT Ops and cloud teams to gain insight into the health and performance of their entire IT stack. While tasked with monitoring and managing infrastructures, their jobs are made difficult because they’re stuck using either antiquated, disjointed monitoring tools or limited cloud monitoring services from Infrastructure-as-a-Service (IaaS) providers.

Legacy tools fall short because those used for monitoring on-premise infrastructure weren’t designed to handle highly ephemeral cloud environments. Similarly, native cloud monitoring services aren’t able to effectively monitor on-prem infrastructures. And for these teams to keep pace with today’s digital demands, they need a solution that offers end-to-end visibility across their entire IT landscape — from physical, on-premise infrastructure to hybrid and multicloud environments. They need a comprehensive solution that can scale massively and leverage artificial intelligence (AI) to automatically and quickly process the mountains of data being generated. By investing in the right solution, organizations can consolidate toolsets, get rid of silos, ensure high performance and speed up investigations — preventing outages and resolving incidents before they impact business and customers.

Splunk helps organizations with:

- **Cloud Migration**: Confidently accelerate cloud adoption with end-to-end visibility into performance
- **Multicloud Monitoring and Management**: Out-of-the-box visualizations for instant insights across all major cloud platforms
- **Tools Consolidation and Rationalization**: Simplify operations and break down silos between systems, teams and tools
- **Infrastructure and App Modernization**: Future-proof monitoring investments to amp up agility and pave the path for growth and success
- **Cost Management and Optimization**: Transparency into cost, usage and capacity to minimize operational and cloud costs

Splunk delivers the speed, scale and analytics needed for dynamic hybrid and multicloud monitoring and management, helping to eliminate tool sprawl headaches and bringing data from across the entire IT stack and across all environments into a single view.
Splunk's Portfolio for Infrastructure Monitoring and Troubleshooting

- **Splunk Platform**
  - Real-time Troubleshooting to Speed Up Investigations

- **Splunk Infrastructure Monitoring**
  - Easy to Use Analytics-driven Monitoring for Valuable Insights

- **Apps and Add-ons**
  - Out-of-the-box Integrations and Visualizations for Fast Time to Value

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Monitoring Modern Infrastructure with Splunk

Splunk offers sysadmins, platform teams and cloud architects the simplest yet most comprehensive solution to monitor and troubleshoot infrastructures and applications. Armed with the ability to quickly detect and resolve issues across the entire spectrum of deployments — on-premises, public, private, hybrid and multiple clouds — teams are able to leverage metrics and logs from any source, at any scale, and in real-time to deliver much lower mean-time-to-detect (MTTD), mean-time-to-investigate (MTTI) and mean-time-to-resolution (MTTR) of issues. Splunk helps improve productivity with AI-driven and machine learning capabilities, and continues to deliver on ever-increasing customer expectations by avoiding even seconds of downtime.

A single view for all data to encourage stronger collaboration across teams
Significantly shorten MTTI, MTTR and MTTD

When it comes to downtime, even a few minutes of performance degradation can significantly damage a company's revenue, reputation and customer satisfaction. With businesses trying to meet the demands of digital transformation, struggling with an unstable infrastructure creates more opportunities for failure. Speed, measured in the ability to find and fix problems in mere seconds, has become more important than ever. Teams need to be able to detect, visualize and resolve issues as soon as they arise.

**Splunk offers fast time to value with out-of-the-box integrations, service auto-discovery and instant dashboards and visualizations.** With an easy and intuitive UI, teams can ramp up quickly and immediately gain value from accurate alerting, correlated full-fidelity and high resolution data. Splunk's streaming architecture enables real-time charts and dashboards with alerts firing in seconds, allowing for real-time interaction with data as well as the ability to deep link and correlate logs. Splunk continuously validates, analyzes and distributes streaming data to gain real-time insights and operational efficiency, allowing teams to speed up investigations and reallocate their time towards more meaningful tasks.

Leverage data from any source, at any scale, across any environment

Traditional monitoring tools are often unable to scale in dynamic cloud environments or effectively monitor new emerging cloud technologies like containers, microservices or serverless environments that produce high cardinality metrics, leading to blind spots and inaccurate analytics.

Organizations need a future-proof solution that scales as demands change and IT landscapes evolve. Splunk offers an open, flexible architecture and ecosystem with hundreds of out-of-the-box integrations for domain investigation and monitoring tools, making it easy to ingest, visualize and investigate data. With this high-resolution and sophisticated visibility, teams can enjoy holistic, comprehensive monitoring across all environments, leveraging data from any source and at any scale. **The flexibility provided by Splunk's full-fidelity solution can help future-proof investments — making it easier to adopt cloud-native technologies at scale and with confidence.** Once teams feel ready and confident, they can leverage the power of Splunk's Data-to-Everything™ Platform and expand and explore other use cases, ultimately advancing in their AIOps and Observability journey.

Prevent issues and streamline workflows with sophisticated AI/ML-driven analytics

The volume and velocity at which IT systems generate data has become impossible for human operators to handle, manual correlation is neither accurate nor real-time and often prone to error. Massive volumes of data need to be aggregated, consolidated and processed quickly so that trends and patterns can be spotted and turned into valuable insights. Splunk offers analytics-driven investigation and monitoring powered by built-in AI and machine learning (ML) to process all system and source data in seconds. **Splunk helps teams keep up and react instantly to dynamic, ephemeral and cloud-scale problems, helping streamline workflows and seamlessly analyze and correlate data.** This leads to actionable insights that reduce event noise and even predict future performance degradation and outages.
Splunk also offers advanced alerting with adaptive alert conditions, allowing teams to set alert conditions with dynamic thresholds and automatic baselining that leverages data science instead of static thresholds for no-noise, point and click alerts. Teams can also preview these alerts to simulate and fine-tune to avoid dreaded alert storms.

**Unmatched Capabilities for Visibility and Agility**

What makes Splunk the **number one market share leader in IT infrastructure monitoring (ITIM)** is that Splunk offers both best-in-class troubleshooting and best-in-class monitoring. Splunk offers the industry’s most powerful analytics-driven hybrid and multicloud monitoring solution for any and all IT environments. Capabilities include:

- **Streaming architecture** to enable real-time monitoring and troubleshooting
- **Instant visualizations and accurate alerts** that fire in seconds with hundreds of pre-built integrations, auto-discovery of services and sophisticated analytics functions for alerting
- **Built-in AI/ML-driven analytics and automation** using data science to power triage and troubleshooting
- **Centralized management** for control and transparency to achieve agility, ability to scale and analyze data from all sources
- **Monitoring-as-Code** to move at DevOps speed and access the entire platform using APIs. Control costs with capacity limited tokens for self-service deployment

Splunk offers the visibility and agility needed to predict and resolve incidents, helping to reduce the frequency of high-priority events and make cost-conscious decisions to free up infrastructure capacity usage. Not only does Splunk make it easier for organizations to scale and save money, it increases productivity and leads to more predictable operations, which ultimately leads to competitive advantages and improved customer and end-user experiences.

“Splunk helps us improve customer experience and keeps our business humming by monitoring our cloud infrastructure, microservices and applications.”

— Head of Engineering, Atlassian

**Splunk customers have seen the following benefits**

- **Reduction of 45%** in high-priority incidents
- **MTTD 80%** faster for better customer experiences
- **Accurate, AI-driven alerts delivered in seconds,** up to **36x faster**
- **Reduce incident investigation time by 90%**

Learn more about Splunk for **Infrastructure Monitoring and Troubleshooting** and get started today with a free trial.