From Code to Deployment
App visibility at every stage in the DevOps release cycle

As DevOps adoption grows, DevOps teams are challenged by accelerated release cycles that lead to new deployment complexity, increased performance and availability issues, and difficulty syncing multiple development workstreams.

DevOps drives cross-organizational team collaboration, which creates the need for more integration between existing legacy tools. As such, DevOps has created a need for more integration between cross-organizational tools. While continuous integration, automated testing and continuous delivery have greatly improved the quality of software, clean code doesn’t mean software always behaves as expected.

Current State
DevOps teams are challenged with monitoring, tracking and troubleshooting issues in a context where tools across the toolchain emit their own logging data.

- Legacy tools not integrated, no single source of truth.
- No standard for logging events from applications that may use Web services distributed across the net.
- Accelerated release cycles lead to deployment complexity.
- Difficulty in collaborating across silos.
- Difficulty syncing multiple development workstreams.
- No predictive analytics to project future KPI violations.
- No proactive push notifications to alert on service outages.

Negative Consequences

No Consistency
- Ops is spending more time troubleshooting.
- Development is drawn into production troubleshooting.
- Service levels have degraded with more frequent releases.
- Performance and availability problems have increased.

No Centralization—Simply put, log data is everywhere
- Logs are distributed across locations in the cloud or various servers.
- Many locations of various logs on each server.
- SSH + GREP doesn’t scale.

No Visibility—High-value data is buried in petabytes
- Expertise required to mine data.
- Meaningful views are difficult to assemble.
- No real-time visibility.
- Immense size of Log Data.

Desired Future State
Enable DevOps teams to analyze, troubleshoot, and perform root cause analysis of issues arising from more frequent release cycles.

- Deliver a comprehensive strategy for monitoring the entire pipeline.
- Easily configure real-time monitoring of the entire infrastructure including stats, events and container logs.
- Troubleshoot issues and set alerts on abnormal application behavior (such as an alert when the quantity of errors per minute exceeds a certain threshold).
- Large-scale graphing of trends (such as requests per minute).

Benefits of Sumo Logic
- Real-time visibility into your application at every stage of the lifecycle.
- Significantly reduce time developers spend troubleshooting issues in production (up to 90%).
• No integration issues - Monitor machine data anywhere, independent of its source, location or format.
• No more parsing data. DevOps teams can focus on their jobs instead of supporting a log analytics tool.
• Improved application performance - Monitor and diagnose performance and availability issues in real time.
• Immediate time to value & reduced TCO via SaaS.
• Streamline frequent release cycles, improve software quality.
• Improve staff efficiency - get a centralized viewpoint that both DevOps and IT Ops can share.

Sumo Logic practices DevOps, releases latest code to product weekly. Status is publicly available at http://status.sumologic.com/.

Key Industry Problems

DevOps teams cite deployment complexity as their #1 challenge. The problem is complexity creates deployment challenges.

• Difficulty in collaborating across silos.
• Multiple development workstreams never stay in sync.
• Frequent performance or availability issues.

Because of its emphasis on automated testing, DevOps has also created a need for toolsets that enable troubleshooting and root-cause analysis. The greatest pain point for many of these teams is additions and modifications to packaged applications that are typically deployed to multi-tenant cloud environments.

Why Sumo Logic?

Sumo Logic delivers a comprehensive strategy for monitoring, tracking and troubleshooting applications at every stage of the build, test, deliver, and deploy release cycle. Sumo Logic provides a single solution that is cloud based, tool agnostic and provides visibility throughout the entire DevOps toolchain. DevOps teams to gain visibility across the entire continuous delivery pipeline as they release frequently and automate more. With Sumo Logic, DevOps teams gain:

• Full Stack Visibility - gather event streams from applications at every stage from sandbox development to final deployment and beyond. Combine with system and infrastructure data to get a complete view of your application and infrastructure stack in real time.
• Increased Availability and Performance - enables issues to be identified before they impact the application and customer. Precise, proactive analytics quickly uncover hidden root causes across all layers of the application and infrastructure stack.
• No integration hassles. Sumo Logic can ingest machine data from applications, systems, network and tools across the entire continuous delivery pipeline, not just server data.
• Streamlined Continuous Delivery.
• Real-time insights. Streamed data can be surfaced on dashboards that you can customize.
• Troubleshoot issues and set alerts on abnormal container or application behavior.
• Visualizations of key metrics and KPIs, including image usage, container actions and faults, as well as CPU/Memory/Network statistics.
• Ability to easily create custom and aggregate KPIs and metrics using Sumo Logic’s powerful query language.
• Advanced analytics powered by Log Reduce, Anomaly Detection, Transaction Analytics, and Outlier Detection.

About Sumo Logic

Sumo Logic is a secure, cloud-native, data analytics service, delivering real-time, continuous intelligence across an organization's entire infrastructure and application stack. More than 700 customers around the globe experience real-time operational, business and customer insights using Sumo Logic for their DevOps, IT ops and security and compliance use cases. With Sumo Logic, customers gain a service-model advantage to accelerate their shift to continuous innovation, increasing competitive advantage, business value and growth. Founded in 2010, Sumo Logic is a privately held company based in Redwood City, CA and is backed by Greylock Partners, DFJ, IVP, Sutter Hill Ventures, Accel Partners and Sequoia Capital. For more information, visit www.sumologic.com.