Message Bus Develops, Delivers and Optimizes Its Cloud-Based Service

Message Bus

Executive summary

Message Bus was founded in 2010 to provide a cost-effective, outsourced alternative for business-class email messaging. The rapidly growing company furnishes email and mobile messaging services that are scalable, secure, priced by usage and provide delivery verification. The company's entire IT and service delivery infrastructure is cloud-based. To ensure the availability and performance of its services, Message Bus needed deep and continuous monitoring of its applications that were distributed across multiple clouds. Since deploying Splunk Enterprise, the company has seen benefits including:

- Faster time-to-market of applications and services
- Enhanced availability of services
- Infrastructure visibility across multiple clouds

Why Splunk

With a software as a service (SaaS) delivery model, Message Bus required data from, and visibility across its cloud-based business. From prior work with other companies, the Message Bus co-founders knew of Splunk software's ability to collect and index machine-generated data and present it as actionable information. As a result, the Splunk platform has been part of the Message Bus product foundation since the firm's inception. "Delivering innovative, cloud-native messaging services is very data intensive," explains Steve Mays, a co-founder of Message Bus. "We require optics into every facet of our business, from building and deploying solutions to monitoring their performance in multiple clouds and billing our customers. For these reasons, Splunk is an essential part of our technology infrastructure that we leverage across nearly all business processes."

Industry

- Online services
- Technology

Splunk Use Cases

- Business analytics
- Application delivery
- IT operations

Challenges

- SaaS delivery model required data from, and visibility across cloud-based business
- Need for deep and continuous application monitoring across multiple clouds
- Requirement to audit customer usage for billing and product development
- Lack of visibility into email delivery status
- Wanted to monitor all message traffic to detect anomalous behavior
- Looking for a way to rapidly develop, test and implement applications

Business Impact

- Faster time-to-market of applications and services
- Enhanced availability of services
- Infrastructure visibility across multiple clouds
- Enterprise-wide business analytics
- Responsive customer service by nontechnical staff
- Eliminated the need for database administrators

Data Sources

- Cloud-native applications
- Remote virtual machines and servers

Splunk Products

- Splunk Enterprise
- Splunk for JMX
- Splunk for IMAP
- Splunk for Unix and Linux

Monitoring service delivery and workloads for agile development

Developers at Message Bus rely on Splunk technology to help build the applications that drive the company's business. They use the platform to collect and index log events that they then query to help debug systems and ensure their functionality. This insight into multiple infrastructure components allows them to quickly test and troubleshoot applications and rapidly deploy new code.

As new systems come online, the operations team ensures they function effectively to meet customer demand. Thanks to Splunk instances running in each cloud, the team aggregates metrics from clusters of virtual machines to monitor service delivery and workloads. Using Splunk dashboards, the operations team can view and graph the data in real time and track trendlines, determining, for example, when a particular system is about to be over-utilized and when to take remedial action.

The ops team facilitates its oversight with several applications running on top of Splunk Enterprise. Splunk for Unix and Linux lets the staff monitor and troubleshoot the operating systems of its remote virtual machines. Splunk for IMAP monitors email from IMAP accounts and graphs them by size or time. Lastly, because Message Bus applications are built on Java, the operations team utilizes Splunk for JMX to monitor its distributed Java application environment for insight into these critical systems.

Deep dive into processes and services

Because the Splunk platform allows for natural language queries, even non-technical staff can access and visualize actionable information. Account managers, for example, use the technology to ensure all email is authorized and properly delivered. They track every customer's email events (an especially vital function because the firm bills its customers by

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their email volume) and audit Splunk data to generate reports and pricing options such as volume discounts.

Splunk alerts notify account managers when an email provider is bouncing email or if a customer's account is experiencing anomalous traffic. They can also identify attempts to hijack a customer's email domain and spoof a customer's brand, thus preventing fraud and protecting reputations and the integrity of messages. Additionally, Splunk helps account managers deliver prompt and efficient service by diagnosing customers' issues without burdening developers and programmers.

A revamped business

Empowered by the Splunk platform, Message Bus serves a rapidly growing roster of customers. By capturing and indexing data from remote servers, systems and applications, the firm has the analytics and intelligence needed to support an agile development environment and a high level of service. Splunk software helps Message Bus speed the time to market of revenue-generating solutions, confirms the lifecycle of every message and analyzes how customers use its services to anticipate their future needs. "We run almost our entire business on Splunk," Mays concludes. "Without the platform, we'd be flying in the dark, unable to assure our customers that our messaging services are any better than what they already have. Message Bus is a data-driven company, which is why Splunk is a core element of our success."

Download Splunk for free or get started with the free cloud trial. Whether cloud, on-premises, or for large or small teams, Splunk has a deployment model that will fit your needs.