Autodesk Saves Time and CapEx Costs with Splunk on AWS

Executive summary

Customers across the manufacturing, architecture, building, construction and media and entertainment industries—including the last 20 Academy Award winners for best visual effects—use Autodesk software to design, visualize and simulate their ideas. Given its large global footprint, Autodesk faced two distinct challenges: the need to gain business, operational and security insights worldwide across multiple internal groups, and the need to choose the right infrastructure to deploy operational intelligence software. Since deploying the Splunk platform, the company has seen benefits including:

• Savings of hundreds of thousands of dollars
• Critical operational and security-related insights
• Real-time visibility into product performance

Why Splunk

Splunk first found a home at Autodesk in 2007 as a way to harness machine data for operational troubleshooting. Today, that usage has expanded to include real-time monitoring, detailed security insights and executive-relevant business analytics across three Autodesk divisions, including:

• Enterprise Information Services (EIS)—responsible for global corporate IT management, including information security and information management.
• Autodesk Consumer Group (ACG)—responsible for all of Autodesk’s consumer-facing products.
• Information Modeling & Platform Products (IPG)—responsible for Autodesk’s solutions for commercial customers, including designers and engineers across all industries.

Autodesk is using Splunk Enterprise Security (Splunk ES) to reduce the time to identify and resolve security issues. The company also uses the Splunk App for AWS to deliver and manage flexible resources for Splunk Enterprise and other critical applications.

Industry

• Technology

Splunk Use Cases

• Business analytics
• Cloud solutions
• IT operations
• Security

Challenges

• Needed to support large global footprint
• Wanted to gain in-depth business, operational and security visibility
• Avoid capital and labor costs required for on-premises infrastructure upgrade
• Ensure security and compliance across cloud environment
• Reduce time required to isolate and resolve security issues

Business Impact

• Save hundreds of thousands of dollars in capital costs, time and labor expenses
• Reduce operational effort by leveraging AWS CloudFormation templates and Ansible playbooks
• Deep insight into product performance, user preferences and usage metrics
• Resolve security issues and avoid the expense of a dedicated SIEM solution
• Gain visibility into AWS accounts and ensure security and compliance

Data Sources

• Thousands of global end points
• AWS CloudTrail
• Apache Kafka messaging broker
• Windows, Linux, Solaris servers
• Oracle, SAP, Siebel, TIBCO applications

Splunk Products

• Splunk Enterprise
• Splunk Enterprise Security
• Splunk App for AWS
**CASE STUDY**

**Splunk on Amazon Web Services keeps the focus on service**

Given the global nature of operations, an on-premises refresh of Autodesk’s Splunk environment would have required a team of eight, cost hundreds of thousands of dollars and taken months. Instead, it took the Autodesk cloud architect just a few weeks to deploy Splunk Enterprise on Amazon Web Services (AWS), saving more than half the capital costs and almost all the labor costs.

The Autodesk cloud architect created AWS CloudFormation templates and Ansible playbooks to provision Splunk on AWS. These services have reduced the total time to provision new end-to-end environments from hours or days to less than 30 minutes. As a result, Autodesk’s total operational effort to manage a global ITB+ a day Splunk deployment across multiple divisions is less than 0.1 FTE.

AWS account visibility is required for each of the hundreds of AWS enterprise customers that are active at any given moment. To meet this challenge and ensure security and compliance, Autodesk leverages the Splunk App for AWS, integrated with AWS CloudTrail and AWS Config. The Splunk App for AWS is used to monitor account activity in real time and audit accounts regularly, delivering a centralized view into Autodesk’s AWS environment that enables rapid response and resolution of operational and security-related issues.

**Diverse divisions gain deep insight into operations and security**

Autodesk’s EIS group relies on Splunk Enterprise to help find, correlate and resolve errors occurring across critical applications. EIS uses Splunk ES to reduce the time needed to isolate and resolve security issues by up to 80 percent and to correlate system performance with security data. Splunk ES has also enabled Autodesk to avoid the cost of a more expensive, dedicated security information and event management (SIEM) solution.

The Autodesk ACG group depends on Splunk-derived business insights to provide executive-level visibility. The business development team, for instance, uses Splunk dashboards to understand the number of active users per project per month, where users are coming from and how the number trends month-to-month.

The IPG group uses Splunk analytics to understand product usage, including the important Autodesk A360. More than 300 IPG members use Splunk Enterprise to conduct product analytics for Autodesk’s Big Data Platform. IPG is experimenting with Hunk: Splunk Analytics for Hadoop and NoSQL data stores, to access and query historical data from Hadoop and quickly create aggregations and dashboards. Hunk allows skilled IPG users to explore and create aggregations from the Hadoop and S3 data lake, even when the data is not stored in Splunk.

**Empower data-driven decisions**

Splunk Enterprise, the Splunk App for AWS, Splunk Enterprise Security and other Splunk solutions are enabling Autodesk to gain important, real-time insight into operational, security and product performance. Splunk’s flexible, data-driven analytics and AWS-based platform are saving Autodesk time, reducing capital costs, and enhancing the scope and depth of critical decisions.

**“Our business development team has a very strong reliance on Splunk Enterprise. They leverage a number of dashboards showing anonymized daily and monthly usage trends, geo distribution of logins per product, device types being used and more. This data helps drive our product and engineering decisions and allows us to continue to improve our products for consumers.”**

Alan Williams, Autodesk Consumer Group (ACG)

**Autodesk, Inc.**

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.