Crossroads Foundation Gains Operational Visibility Into Mission-Critical Systems

Executive summary

Crossroads Foundation (http://www.crossroads.org.hk) is a Hong Kong-based nonprofit organization founded in 1995, committed to improving the lives of the poor, the needy and the disadvantaged through its four global services. To carry out its work, Crossroads Foundation demands both a global logistics network and an IT infrastructure that requires a high level of efficiency and constant monitoring. The organization needed a solution capable of scaling to its needs while maximizing the capacity of its core IT team. Since deploying Splunk Enterprise, Crossroads Foundation has seen benefits including:

- Operational visibility
- Effective change management
- Deeper understanding of campaign effectiveness

Why Splunk

Almost all of Crossroads Foundation's activities are supported in some way by IT infrastructure—from receiving phone calls from the community to donate valuable goods, to the server infrastructure supporting the Global Hand (http://www.globalhand.org) platform, to the e-commerce applications that drive the Global Handicrafts fair-trade shop (http://shop.globalhandicrafts.org), to the considerable audio/visual infrastructure that provides added realism to the Global Village experiential activities (http://www.crossroads.org.hk/lifex-perience/). But while the reach and impact of the Crossroads Foundation is expanding rapidly, the size of the Crossroads IT team is limited.

Thanks to a free Splunk software license donated by Splunk Inc., the Crossroads Foundation has been able to ensure consistency, security, efficiency and reliability of its systems, a critical part of fulfilling obligations to its partner organizations. With Splunk, Crossroads is able to manage IT support for Hong Kong, UK, Kazakhstan, Australia and France across virtually every aspect of its work, including its volunteer infrastructure and ability to receive online cash donations. By increasing reliability and management efficiency of the IT systems that underpin the organization, the Splunk platform has added value to the Crossroads Foundation's core mission and ultimately the people it serves.

Industry
- Nonprofit

Splunk Use Cases
- IT operations
- Security and PCI compliance
- Business analytics
- Internet of Things

Challenges
- Needed to monitor its global logistics network and widely distributed IT infrastructure
- Wanted to maximize the capacity of its core IT team
- Needed to meet PCI compliance regulations
- Required change management to address partner requirements

Business Impact
- Operational visibility into critical systems, processes and production changes
- Effective change management for Unix-like and Windows environments "out-of-the-box"
- Fulfills PCI compliance, allowing online payments and donations
- Reduced operational costs
- Superior service to donors, recipients and partner organizations

Data Sources
- Active Directory Forest, Windows registries and Linux configuration files
- Logs from network devices
- Data from environmental sensors
- Application logs

Splunk Products
- Splunk Enterprise
- Splunk App for PCI Compliance

Operational visibility across physical and virtual infrastructures

Splunk Enterprise's ability to aggregate and increase the visibility of Crossroads' systems, both physical and virtual, has greatly reduced the manpower required to maintain these systems. With Splunk Enterprise, application faults, security issues and other errors can be identified and addressed in a prompt and timely fashion. Through the centralized collection of log data from network devices, Splunk now provides insight into the operations of the entire Crossroads network, allowing rapid fault identification and remediation, and minimizing disruptions. In addition, via historic tracking of both system and application resource usage, Splunk has helped Crossroads reduce operational costs by allowing for the optimal deployment of resources within the foundation's limited budget.

Splunk has been instrumental in the success of Crossroads' Tuen Mun campus network improvement initiative by providing a centralized logging and reporting mechanism that has increased visibility across the 14 acre network infrastructure covering the campus, comprising more than 20 separate buildings. Through real-time tracking of environmental sensors and the use of Splunk software's alerting features, equipment problems caused by temperature fluctuations or water damage can be avoided, which has increased equipment life and reduced unnecessary expenditure.

Change management made simple

First-rate change management and monitoring of its diverse hosting environments is key to Crossroads' fulfillment of its obligations to its partners. According to Thomas Pike, IT manager for Crossroads Foundation, "Splunk provides out-of-the-box change monitoring support for Unix and Windows environments. I was able to create dashboards in a few minutes to provide real-time visibility of production

"Splunk helps us to go beyond reactive. We now use Splunk software for analytics. We want to correlate outside temperature from our sensors with the number of volunteers we get. By analyzing this data over time, we can predict how much food we'll need to provide to our volunteers based on expected temperature. This can help us optimize costs, since even one dollar can help save a life."

Thomas Pike, IT Manager
Crossroads Foundation

system changes." Crossroads' Global Hand platform now develops and operates hosted web applications for high-visibility organizations such as the United Nations free of charge (http://business.un.org).

Fulfilling PCI compliance

The Payment Card Industry (PCI) data security standards ensure the safe handling of cardholder information, with rigid rules for organizations accepting online credit card payments. Crossroads effectively monitors all credit card transactions—including donations—with the Splunk App for PCI Compliance. Pike notes, "Using Splunk Enterprise, we are now able to meet PCI compliance and accept online credit cards for our Global Handcrafts fair trade store. Splunk provides a short, painless path to prove PCI compliance with little overhead."

Freeing up resources to streamline operations

All of Crossroads' services and websites rely heavily on IT infrastructure, which in turn relies on the strengths of Splunk for continued operation. Through the use of Splunk software, Crossroads is able to more effectively allocate IT resources, reducing costs and staffing requirements for continued operations. These freed resources can then be redirected to the primary cause of the Crossroads Foundation—to help the needy both locally in Hong Kong and internationally.

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.

splunk>   Learn more: www.splunk.com/asksales   www.splunk.com