The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization name:
Splunk Inc.

Organization URL:
www.splunk.com

Project Name:
Data Empowerment and IT Infrastructure/Supply Chain Management for Crossroads HK

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

One Hong Kong-based non-profit organization was looking for a way to collect all the machine data generated from their IT infrastructure, and obtain real-time operational intelligence that could be used throughout their organization. Splunk provided the solution. Crossroads Foundation is a Hong Kong-based NPO committed to linking those who are in need with those who can provide help. Armed with a free license of Splunk software donated by Splunk, Inc., Crossroads was able to ensure consistency, security, efficiency and reliability of their systems, a critical part of fulfilling obligations to their partner organizations. Each year, Crossroads collects more than 160 20" container equivalents of unwanted goods in Hong Kong, ranging from medical equipment to toys and orphanage equipment to musical instruments, and distributes them to where they're needed all over the globe. To do this requires both a global logistics network and an IT infrastructure that requires a high level of efficiency and constant monitoring. This is where Splunk comes in. With Splunk, Crossroads was able to manage IT support for Hong Kong, UK, Kazakhstan, Australia and France across virtually every aspect of the Foundation's work, including its volunteer infrastructure and ability to receive online cash donations. Volunteers are what drive non-profits, and Crossroads is using Splunk to manage this all-crucial resource. Crossroads uses Splunk to correlate outside temperature data from its sensors with the number of volunteers they get. By analyzing this data over time, they can predict how much food they will need to provide their volunteers based on expected temperature.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

According to Thomas Pike, IT Manager at Crossroads, "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 system changes. Splunk helps us go beyond being reactive." Using Splunk, Crossroads has: Effective change management for both Unix-like and Windows environments out of the box; configured Splunk to provide a historic record of Crossroads' Active Directory Forest, Windows Registries and Linux configuration files; eased difficulties in monitoring changes made to production systems; provided visibility of systems changes to staff; security posture of its Cisco firewall applications; deployed network devices log, via syslog, to Splunk indexing server Index/Search 9GB/day. Crossroads uses Splunk to correlate outside temperature from its sensors with the number of volunteers they get. By analyzing this data over time, they can predict how much food they need to provide their volunteers based on expected temperature. This helps Crossroads optimize costs. Crossroads also uses Splunk in the area of PCI compliance, the payment industry data security standards that ensure the safe handling of cardholder information. Using Splunk, Crossroads is able to meet PCI compliance and accept online payments with little overhead. Additionally, Crossroads needed visibility across its network infrastructure in their Hong Kong facility. Using Splunk for Cisco Security and Splunk for Squid, they were able to gain the end-to-end visibility they required to monitor their security posture. Crossroads takes pride in its ability to react quickly following a disaster. After a disaster, the Hong Kong community responds generously with donations, volunteering and funding. Transportation companies are quick to waive freight charges to enable the goods to reach the disaster areas promptly. To move as quickly as the supply chain, Crossroads relies on Splunk.

Please list the specific humanitarian benefits the project has yielded so far.

As with the example above, Crossroads uses Splunk to correlate outside temperature from its sensors with the number of volunteers they get. With this analysis, they can predict how much food they will need to provide their volunteers based on expected temperature. This helps Crossroads optimize costs, spending the right amount of resources, with the remainder going directly to the community they serve. Another example includes Crossroads' use of Splunk to insure its web presence remains strong and serving its vast support network. Crossroads' Global Hand website (www.globalhand.org) offers an online interface set up to help match corporate resources and disaster/development needs. The website services include: Offers and Requests, a transactional service for offers of goods, human resources, freight and funding, set up to facilitate the development of long-term public/private partnerships, as well as spontaneous offers; Standards of Best Practice, a showcase of its efforts to go beyond donations, to develop standards in an attempt to anchor transactional activity in sound practice, minimize aid dependency and empower those partnering with the private sector; and the Library, set up to connect all parties with carefully chosen information searchable by location, need type and services, at both national and international levels.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

Crossroads uses Splunk to correlate outside temperature from its sensors, with the number of volunteers they get. With this analysis, they can predict how much food they will need to provide their volunteers based on expected temperature. This helps Crossroads optimize costs, spending the right amount of resources, with the remainder going directly to the community they serve.