Visibility Spells Reliability for Mobile Service Provider



Safaricom increases network uptime and reduces manual management chores by deploying Cisco Smart Net Total Care.

EXECUTIVE SUMMARY

Customer Name: Safaricom Industry: Integrated communications Location: Nairobi, Kenya Number of Employees: More than 2500

Challenge

- Improve reliability of IP network
- Reduce labor and complexity involved in managing and updating network
- Use network services and quality to gain competitive edge

Solution

- Cisco Smart Net Total Care service captures and manages data on Cisco network components
- Smart Net Total Care automation replaces manual network inventory tasks and provides consolidated reports
- Visibility into every corner of network shifts support from reactive to proactive mode

Results

- Reduced network downtime by more than 60 percent with Smart Net Total Care
- Exceeded Safaricom's Customer Delight Index targets for first time
- Reduced man-days required for network inventory from 90 to 3 while improving accuracy

Challenge

As Kenya's largest integrated communications company, Nairobi-based Safaricom provides mobile telecommunications services as well as voice, messaging, data, and fixed broadband to more than 17 million customers across the African nation. To that end, the company has amassed a vast communications network since its 1997 founding. Not surprisingly, the job of managing that network has grown increasingly complex.

In addition to the normal challenges associated with synchronizing and updating the myriad devices connected to a multivendor network, Safaricom faces some not-so-typical challenges related to Kenya's geography and status as an emerging nation. Chief among these is the reliability of its transport network. With a significant portion of Kenya's population residing in rural areas, the power company is still working to provide electricity to the entire country. This means that in areas where there's no commercial power, Safaricom must run its sites on generators. In addition, because Safaricom must rely on outside providers to lay the fiber for its network, the quality and placement of that fiber can vary. As a result, the service provider experiences between 5 and 25 fiber cuts, or accidental tears in the optical fiber, every day.

To compensate, and help ensure network uptime, Safaricom has had to introduce extra fiber routes. Says Safaricom head of network and service operations Elly Odera, "To reduce our liability, we've had to introduce as many as six alternate routes in some locations. And these have a big impact on network operations and reliability." The result: more complexity. By 2012, Safaricom was devoting significant labor and resources to manually updating and inventorying its network, yet it still didn't have a complete picture of the network or the ability to manage it proactively. For a company trying to differentiate itself through services and network quality, this was a problem.



"Since implementing the Smart Net Total Care service, we have reduced network downtime by over 60 percent. We've also exceeded our Customer Delight Index (CDI) target for the first time ever."

Elly Odera

Head of Network and Service Operations Safaricom

Solution

Luckily for Safaricom, it already had a partner that could help. Having invested in Cisco[®] solutions since 2008, when it acquired a Cisco 700 Series router for an IP network intended to make the enterprise backbone more viable, Safaricom now runs that network on all Cisco solutions. As a result, the company also takes advantage of a number of Cisco Services to support that network, including Cisco Network Optimization Service, Cisco Focused Technical Support Services, and more. Thus, when a member of the Cisco Services team proposed Cisco Smart Net Total Care, a proactive support service, as an alternative to the manual network discovery and management processes Safaricom had been employing, Odera was eager to give it a try.

"We already had lots of Cisco Services personnel on site," says Odera, "but they were largely providing reactive support, responding to problems that had already occurred or helping us perform manual updates and inventories. I knew that with Cisco Smart Net Total Care service, we could make better use of both our own resources and those from Cisco."

Today, Safaricom has two Smart Net Total Care collectors capturing operational data on deployed Cisco network devices, and for the first time the company knows exactly what's on the network. Says Odera, "We have a very big network with lots of equipment at many locations. Before we deployed Smart Net Total Care, we really didn't know what we had, especially at our remote locations. But today, we know exactly what we have, which makes it easy to pinpoint problems. Best of all, Smart Net Total Care has helped us guarantee network uptime because we're not running items that are at the end of their lives or are no longer supported. And that goes a long way toward addressing our number-one challenge, which is network reliability."

Results

Indeed, for Safaricom, increased network uptime translates directly to improved customer satisfaction. Says Odera, "Since implementing the Smart Net Total Care service, we have reduced network downtime by over 60 percent. We've also exceeded our Customer Delight Index (CDI) target for the first time ever. This is not surprising given the strong correlation between network reliability and customer satisfaction."

But it's not just Safaricom's customers who are benefiting. Freed from timeconsuming manual tasks, Safaricom engineers are now spending more time improving their skills. And with better visibility into network resources, IT can now manage inventory, contracts, and end of life/end of service far more effectively.

To understand just how much more effectively, consider the following: Nine months after deploying Smart Net Total Care, the number of man-days required for updating inventory had fallen from 90 to 3, and the tools used from 10 to 2. At the same time, inventory accuracy rose from 65 percent to 100 percent. Safaricom has also watched the hours per year spent maintaining Cisco contracts fall from 120 to 16, and the hours per month devoted to identifying relevant product alerts fall from 60 to 5. Perhaps most tellingly, Safaricom is now reporting a 90 percent confidence level that all alerts are known at any given time and that end of life/end of service status is fully known, a sharp increase from the 10 percent confidence levels reported prior to deploying Smart Net Total Care. In a competitive market, all of these efficiencies add up. Says Odera, "Safaricom may be the market leader, but plenty of other companies are fighting for our spot, and they're all lowering prices to gain market share. The time savings we gain from using Smart Net Total Care represent cost savings that we can pass on to our customers. And if we can cut costs *while* improving services, which is what Smart Net Total Care allows us to do, our competitors will be hard pressed to overtake us."

Next Steps

Soon, Safaricom hopes to begin selling Smart Net Total Care to customers as well. "If we can provide our customers with more managed services like Smart Net Total Care, we'll also be able to gather more information from them," says Odera. "That ability to see what customers across the country are using will be enormously beneficial to both customers and the company. At the end of the day, Safaricom wants to be known as the best network in Kenya, and we will continue to rely on Cisco to help us achieve that goal."

For More Information

To find out more about Cisco Smart Net Total Care, go to www.cisco.com/go/total.

Services List

- Cisco Smart Net Total Care
- Cisco Advisory Services
- · Cisco Focused Technical Support Services (including High-Touch Technical Support)
- Cisco Network Optimization Service
- Cisco Data Center Optimization Service
- Cisco Intelligent Automation for Cloud



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