# Crayola

## Color Company From The Beginning

From its earliest beginnings, Crayola LLC has been a color company. Now a wholly-owned subsidiary of Hallmark Cards, Crayola LLC came into being when cousins Edwin Binney and C. Harold Smith took over Edwin's father's pigment business in 1885. More than 115 years later, color—along with creativity, learning and most of all, fun—is the company's hallmark.

The company, which employs 1,200 people worldwide, is most famous for its Crayola® products, which are sold in more than 80 countries from the island of Iceland to the tiny Central American nation of Belize. They are packaged in 12 languages: English, French, Dutch, German, Italian, Spanish, Portuguese, Danish, Finnish, Japanese, Swedish and Norwegian.

## Challenge: Managing a global network

The Crayola LLC network supports worldwide operations including corporate and manufacturing facilities in Easton, Pennsylvania; three major U.S. sales offices; the corporate and manufacturing facilities of Crayola LLC International in the U.K; marketing, sales, service and distribution operations in Canada, Mexico and Australia; and international sales offices in France, Italy and Spain.

The corporate and manufacturing facilities use a gigabit backbone from the data center to the distribution closets. One-hundred megabit fiber and T1 lines connect to other regional offices, manufacturing, and warehouse facilities. Cisco VPN solutions connect sales offices and international locations.

"Network performance directly affects employee productivity," says Oren Woodruff, LAN/WAN Integrator for the company's Information Solutions department. "I need solutions that can constantly monitor network performance and identify problems. And, it's really important that I be able to see what happened in the past, because many problems aren't reported until hours or days have passed."

## In Brief

## Challenges

- Difficulty troubleshooting and determining the source of application performance problems, especially intermittent ones
- Too much time spent "fire fighting," too little time available for strategic projects
- Difficulty planning for network upgrades and consolidations

## Solution

- SteelCentral AppResponse in the Easton, Pennsylvania data center for better visibility into application performance problems
- Extensive real-time and historical reporting of over 60 critical metrics
- Easy drill-down to problem causes
- Reports network and application performance metrics in terms of business impact

## Benefits

- A faster and more efficient network team
- Immediate awareness of performance degradation in critical applications and WAN links and clear visibility into causes
- More time for strategic projects
- Better capacity planning for network upgrades and consolidations

## Solution: Just one appliance for global visibility

Oren's team didn't have any tools that could store historical data and analyze TCP sessions in detail. "When someone complains that the network is slow, we need answers right away," says Oren. "There are too many network components involved to manually diagnose problems, and too often the problems went away before we could figure out what was happening, and couldn't be re-created."

A brief trial of Riverbed® SteelCentral™ AppResponse convinced the IS team that it could deliver the information they needed.

"Set-up was quick and easy," notes Oren. "But the product's feature set is so rich that although many benefits were immediately apparent, it took a few weeks for us to really see just how much (SteelCentral AppResponse) was helping.

The (AppResponse) appliance has two traffic interfaces, so it was deployed to monitor both traffic between the data center and users on the private network, and Internet traffic, such as the VPNs to sales offices and overseas locations.

"Whether the problem is on our private network, where I have other sources of information, or on the Internet, which used to be a blind spot, (SteelCentral AppResponse) is the first tool I go to, to find out where the problem exists—network, server, or client—so that I can get the appropriate people on it right away."

"SteelCentral AppResponse's extensive set of capabilities allows us to keep the network staff size small but still be proactive about network problems and line usage. We now know more about how the network is running, where problems are located, and we can do projections of future requirements."

## Benefits: Always on the job

Oren especially appreciates AppResponse's ability to break down TCP sessions into network and server components. "At the time of our purchase I'd never seen a product that could deliver that detail. Since then, I've run across one other, but it can't analyze historical data, which is an absolute necessity for intermittent problems.

"Since (AppResponse) stores data for up to a year, we always have the data we need to track down intermittent problems. We still use Sniffers, of course, but they're of no use with problems that can't be reproduced at will."

Oren also singles out the product's extensive alerting capabilities. "We're able to set alerts on a wide range of possible anomalies, which often means we're well along in solving a problem before users even notice it." For instance, critical network links are monitored for high usage spikes so that critical applications won't be starved for bandwidth, and alerts are maintained on the response time of all critical servers.

## The bottom line for Crayola LLC

Asked to summarize why he'd recommend AppResponse to a peer, Oren says it's all about visibility: "SteelCentral AppResponse's extensive set of capabilities allows us to keep the network staff size small but still be proactive about network problems and line usage. We now know more about how the network is running, where problems are located, and we can do projections of future requirements."

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**About Riverbed**

Riverbed, at more than $1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed's 26,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at riverbed.com.