

## StockCharts

### Impact Highlights

- StockCharts.com wanted to make sure their data center delivers charts quickly, without having to spend millions of dollars in excessive hardware.
- Keynote provided a very cost effective solution for comprehensive performance monitoring, without requiring several resources to administer and manage the toolset.

*"Keynote's measurement infrastructure allows StockCharts.com to emulate the precise end user experience from where the user is. When I get a number back from Keynote from NY, for example, which indicates that things look good, I can be confident in the accuracy of that data and that NY users will have a good experience."*

*StockCharts.com Assures Optimum User Experience with Keynote Web Test & Measurement Products*

### Overview

StockCharts.com was founded in 1999 to help online investors obtain and use financial information more effectively. The Web site provides immediate, real-time stock charts with statistical analysis to over 13,000 enterprise and consumer customers through a variety of very cost effective subscription-based services. The site serves up an average of 2,000 charts per minute—at peak times over 10,000 charts every minute.

"For the first time, online investors can actually see the dynamic interplay between markets, sectors and stocks. Anyone who visits StockCharts.com regularly cannot help but become a better informed investor," said Chip Anderson, CEO of StockCharts.com. "Given the criticality of the data we deliver to our customers, optimum infrastructure performance and real-time chart delivery is mission critical

to the success of our business. We used Keynote Test & Measurement products such as Transaction Perspective® successfully for some time but needed a way to monitor our performance for multi-page transactions and business processes at a deeper level and perform instant root cause analysis. Keynote Application Perspective was the answer."

### The Business Challenge

The underlying infrastructure of StockCharts.com consists of over 40 servers, many linked to back-end market data feed vendors. The impact of downtime is very significant, as one may expect, given the business model and the critical nature of the data it delivers.

"We get feedback from our users all the time telling us there may be a problem but they are not able to be specific. We need to have scripts that give us a much more specific answer than a user could and we need to get that answer really fast."

"Obviously, in this competitive space, delivering data in a timely manner is mission critical to our business. And if

we have a problem that affects customers, it can cost us real money. For example, a while back we experienced one day of downtime caused by an outage from one of our data vendors. We had to make good on that by giving our customers one month of free service. With our customer base, that translated into \$150,000 of lost revenue! If that happened with any regularity, we would be out of business. We must address that type of situation proactively. That is where Keynote comes in."

"We must make sure that charts are delivered by our data center at the speed our customers expect, without having to spend millions of dollars in excessive hardware. We compared Keynote Application Perspective to other services and software and found that Keynote Application Perspective provided us with all the performance monitoring and root cause analysis functionality we needed without excessive resource requirements."

### **Solution**

Once StockCharts.com personnel understand what is affecting performance, the next step is to resolve the incident in minutes, and restore the service instantaneously, while logging the problem for root cause analysis at a later stage. "Using Application Perspective we can take a fuzzy piece of customer feedback and quantify it to get down to the root of the problem," said Anderson.

"We've always been impressed with Keynote's globally distributed infrastructure and coverage on many different backbones since our

customers are distributed all over the world as well. Keynote's measurement infrastructure allows StockCharts.com to emulate the precise end user experience from where the user is. When I get a number back from Keynote from NY, for example, which indicates that things look good, I can be confident in the accuracy of that data and that NY users will have a good experience."

"Before, if we had a problem with a Web server—with an expired SSL certificate for example—we did not know about it until a customer notified us. That was typically several very significant hours beyond when Keynote would have notified us. With Keynote, we get an alert, detect the problem, restart the Web server and lose very few if any sales."

### **Keynote Application Perspective is the Answer**

"When Keynote says there is a problem, StockCharts.com can rely on the validity of information and focus on problem resolution instantly.

Application Perspective allows us to extract actionable intelligence from a plethora of raw performance metrics and data. Ongoing solution maintenance and total cost of ownership is very low given the hassle-free service delivery model—no hardware, software upgrades, patches etc. that we need to deal with. We obtain performance intelligence instantly, act upon it using our best practices in place, and keep the user experience at consistently high levels."

## About Keynote

Keynote Systems (NASDAQ "KEYN") is the global test and measurement company for mobile communications and online business performance. As an independent and trusted third-party, Keynote provides IT and marketing executives with an unbiased view into their Internet services from around the world. For over a decade, we have been providing measurement data and testing capabilities that allow companies to understand and improve their customer's online and mobile experience.

Keynote Systems, Inc.  
777 Mariners Island Blvd.  
San Mateo, CA 94404  
Main Tel: 1-800-KEYNOTE  
Main Fax: 650-403-5500  
product-info@keynote.com

"Using Keynote, StockCharts.com can measure the exact user-experience from representative locations, and provide immediate alerts which let us know about any deterioration in the user-experience. Script Creation to measure complex multi-page transactions is easy with the IE based recorder. Time to create multiple monitoring and troubleshooting scripts is greatly reduced."

## How StockCharts.com Uses Keynote

StockCharts.com uses Keynote in two main ways—incident management and problem management. It measures the site main page from Keynote's global network using the Web Test & Measurement products. This provides an early warning of an overall site problem that might affect a majority of the users.

For transactional measurements, StockCharts.com uses a representative sample from Keynote Application Perspective . For each transaction it wishes to monitor, it proactively creates a few troubleshooting transactions that are executed from a high-frequency Private agent at their premises, to exercise the various transactional nodes extensively. Each agent is capable of generating up to 3,000 pages / hour, and provisioning new measurements takes only 4-6 minutes.

1-800-KEYNOTE  
(1-800-539-6683)  
www.keynote.com

© Keynote Systems, Inc.  
All rights reserved. The Mobile & Internet Performance Authority and Perspective are registered trademarks of Keynote Systems, Inc. Other trademarks are the property of their respective owners. CS1021v1

 **KEYNOTE**<sup>®</sup>  
The Mobile & Internet Performance Authority™