

Performance & Capacity Planning for Payments Processors

Managing the performance of credit card transaction processing in real-time with the Sightline™ software suite

Business situation

For two global payments processors that handle billions of merchant transactions each year, ensuring continuous uptime and providing rapid responses to credit card authorization requests are top priorities. The explosive growth in card-not-present e-commerce transactions coupled with ever increasing card-present transactions has spurred tremendous business expansion while presenting new challenges for operations staff responsible for maintaining service levels. At the heart of each company's operations are several Stratus® V Series systems, delivering the performance and industry-leading uptime required for these high-volume 24/7/365 customer-facing operations.

Critical to achieving response time goals is each company's ability to rapidly identify and resolve any problems in its processing, networking and communications systems. One company was using in-house tools to monitor system performance in real time — requiring IT staff to spend several hours on data analysis each day. The other company was using a product that provided ad-hoc reports on system performance. Each organization recognized the need for a comprehensive, automated,

“Sightline collects and analyzes sophisticated data in real-time — with no noticeable impact on the performance of our production system. Its intuitive Web-based interface makes it easy for us to pinpoint performance bottlenecks, optimize use of system resources and project future capacity needs.”

- IT Manager

Quick Facts

Sold and Supported by Stratus

Solution profile

- Provides visibility into performance data from servers, applications, networks and other sources
- Enables staff to detect and diagnose performance problems in minutes
- Proactively issues alerts upon detection of abnormal system activity
- Performs trend analysis for capacity planning
- Facilitates optimal use of system resources

Products

- Sightline™ performance management solution
- Stratus V Series (OpenVOS) and Continuum platforms

Services

- Ongoing technical support: Stratus and Sightline Systems
- Available on all standard operating systems

performance management solution that would provide point-and-click visibility into the end-to-end, real-time performance of its payments processing system.

Business objectives

Each company developed a similar set of objectives for effectively monitoring and managing system performance:

- Automate the continuous collection of live performance data from multiple sources
- Perform near real-time analysis of the data and present the results graphically
- Make it easy for the operations and management staff to explore the graphical results
- View analysis and correlation of selected data on demand
- Impose little, or no, impact on the performance of the production system

Business solution

Based on positive experiences with a trial installation, each company chose the Sightline™ software suite from Sightline Systems Corporation. Sightline, sold by Stratus, is a real-time performance and capacity management solution designed for complex “lights out” IT environments. The software continuously captures, stores and analyzes real-time performance and event data, producing actionable information to help detect and diagnose performance issues.

Count On Stratus™



The Sightline solution features powerful data collection capabilities, a robust analytic engine, and an interactive user interface. Specially designed data collection agents capture real-time performance data across the entire processing environment, including servers, applications, networks, databases and other external sources. Data is aggregated, stored and sent to a dedicated server for analysis and display. Centralized historical data provides input for sophisticated trend analysis used to project future capacity requirements.

Automated analysis tools apply application-specific “rules” to identify abnormal conditions that may impact service levels. Rule parameters, based on user-defined metrics and thresholds, can be configured after a discovery session with a Sightline engineer or can be ascertained from the running system. Periods of abnormal activity are flagged and isolated, and user-defined alerts are issued. An industry-leading correlation engine compares interrelationships within the cross-tier data collected, offering insight into potential causes of performance problems.

“Within hours, we were able to view simultaneous performance data from our servers, applications and networks. We immediately started drilling down into the data, and quickly resolved a problem that had concerned us for weeks.”

- Director of Operations

The user-friendly Web interface presents a consolidated graphical view of multiple data sources. Authorized users can isolate specific periods of abnormal activity and drill down into the data, or initiate further analysis on demand. Customized reports and alerts are delivered through the Web-based interface, ensuring any time, anywhere access to critical performance information.

Business impact

Sightline’s ability to layer performance metrics helped IT staff at one company resolve a system problem that had been plaguing them for some time prior to the installation. By examining the impact of several metrics simultaneously, they were able to quickly trace the performance problem to a source code issue. Sightline’s real-time analysis and visualization capabilities enable both companies to pinpoint problems in minutes rather than days or weeks, freeing up IT staff to focus on other responsibilities. As a result, one company was able to expand

the role of key members of IT staff previously dedicated to monitoring system performance.

Operations managers and executives at both companies use Sightline as a business analysis and planning tool. Easy access to Sightline’s graphical displays and customized reports enables them to track service levels and view performance metrics whenever they want. After running a trend analysis using 18 months of historical data, one company projected a need for additional capacity to accommodate an upcoming busy shopping season. As a result, the company was able to proactively plan and budget for the additional capacity, while ensuring it could deliver superior service throughout the upcoming peak period.

Sightline has proven invaluable in helping these companies achieve stringent response time goals with their payments processing systems. By providing visibility into system-wide performance and insight into data relationships, Sightline simplifies the day-to-day management of their complex mission-critical operations. Sightline’s intuitive, powerful analytic capabilities aid management in making intelligent, informed decisions about processing system requirements. Together, the Sightline solution and Stratus V Series systems provide the continuous availability and rapid response capabilities required to maintain industry-leading payments systems while controlling operational costs.

About Stratus Technologies

Stratus Technologies focuses exclusively on helping its customers keep critical business operations online without interruption. Business continuity requires total availability throughout the IT infrastructure, including virtual environments. Stratus solutions include high availability software, fault-tolerant servers and a wide range of availability services. For nearly three decades Stratus has served as a trusted solutions provider to customers worldwide from a diverse set of industries. For more information, please visit www.stratus.com.

About SightLine Systems

SightLine Systems delivers leading edge, cross-platform performance management and capacity planning solutions for mission-critical infrastructure. SightLine’s solutions allow the IT professionals that manage the most diverse and complex environments to predict, detect, diagnose and prevent performance problems before users or services are negatively impacted or customers and revenues are lost. For more information, please visit www.sightlinesystems.com.

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