Solution Sheet

Reach Peak Web Application Performance with User Endpoint Data and Analytics

Improve end user productivity and save your organization money with granular, actionable line-of-business web application performance analytics

Overview

Understanding how web applications are performing in your environment is essential to running an efficient enterprise. However, the performance monitoring tools commonly used today are generally specialized devices or applications, running from a limited endpoint or network location or directly on the server. These tools provide useful information, but cannot deliver a complete picture of the actual performance and end user experience of a web application. New tools are required, designed for the complexities and uniqueness of web applications.

With more of your daily workflow powered by business-critical web applications, suffering from poor performance can have a very significant cost to your company. Poor application performance causes lost end user productivity and generates an increase in helpdesk calls. For web applications used by employees in customer facing disciplines (e.g., customer support or sales), web application performance problems directly impact the customer's experience with your company and your bottom line. On the IT side, if your web applications are not scaled correctly for their workloads, you can experience significant costs due to extra monitoring and frequent emergency maintenance activities.

Today, Browsium browser management software delivers detailed performance analytics from the user endpoint within your organization. With this essential data, you are empowered to accurately monitor, optimize, and troubleshoot your critical line-of-business web applications and, as a result, improve your workforce's productivity and ultimately save your company money. This solution sheet describes the benefits of user endpoint monitoring compared with traditional approaches, and explains in detail how Browsium Proton can be used to monitor and optimize web application performance in your organization.

Traditional performance monitoring

Application management telemetry and analysis tools aren't new. A variety of vendors have been selling them for years. But most of these existing tools were designed before the browser became the dominant workplace platform for accessing business applications. Some performance telemetry tools approach monitoring by using defined, specialized endpoints that perform targeted queries to test for response time or availability. The problem with that approach is that it doesn't represent the end user experience in any meaningful way. In addition, those tools are usually designed to provide notification and alerts, which often calls attention to a temporary server availability issue that often resolves itself by the time it can be investigated.

Server monitoring provides excellent insights into the health and performance of the server, but that's just one element of a complex picture. Server monitoring fails to account for the data transmission or actual application rendering done by the browser on the end user PC. Likewise, with network monitoring, you're only seeing a partial picture of the actual performance of the web application.

User endpoint monitoring

Monitoring and managing web application performance at the user endpoints provides you with a richer and more accurate representation of each web application's true performance where it matters the most – on the end user's PC. By monitoring and managing performance at the user endpoint, you can glean detailed insights about performance issues by focusing the analytics on how long it takes for each web page to be ready and usable by the end user. Rather than chasing performance data anomalies that may or may not be impacting the end user experience, you can home in directly on trouble-spots with user endpoint measurements. And by accessing historical performance data, you get a clear viewpoint and deeper insight into the patterns of a performance issue. Only when you have access to granular information about an application's performance, at the point of end user experience, can you effectively isolate and troubleshoot web application performance issues.

User endpoint monitoring in action

To better illustrate the use of user endpoint performance data, it's helpful to think about your customer service environment. Your call centers process incoming calls to address support issues or take new orders. Even the smallest delays cost money and result in frustrated customers. User endpoint monitoring can identify and highlight issues and anomalies – by user, application, geography, or time – that would otherwise be invisible to other performance monitoring solutions.

To act on this data, you need reports of web application performance at a rollup level which include individual detailed reports for each client, making it easy to find outliers. You also need data clearly displayed in charts and graphs, making trends easy to spot without pouring over large data sets. With the ability to see the big picture and drill down quickly to problem areas, you will gain the critical insights missing from your current IT operations management toolset, enabling your team to deliver effective IT services to your organization.

Performance analytics with Browsium Proton

Browsium Proton is the browser management software module that provides you with very simple and powerful sets of data and insights to assist you in troubleshooting and isolating web application performance issues. Performance is seen by the actual client endpoints in your enterprise, at a granular level. Using this data, you can determine if performance problems exists on a web application for a single user, grouping of users, geographic area, or if the issue is impacted by time of day or even by other browsing activity. This data identifies issues and

anomalies that would otherwise be invisible to existing performance monitoring solutions, such as interdependent components loaded in the browser while accessing specific web applications. With this data, you can fine-tune web application performance to improve productivity in your enterprise, resulting in cost savings for your organization.

How user endpoint performance analytics works in Proton

Proton collects detailed activity metrics for each navigation in each browser, including how long each page load takes on each client PC. With this data, Proton summarizes the performance of multiple web applications, including historical and current page load times, and how the current load times compare with the historical average. This is displayed on the different charts available on the main Performance and Access Details pages generated by Proton.
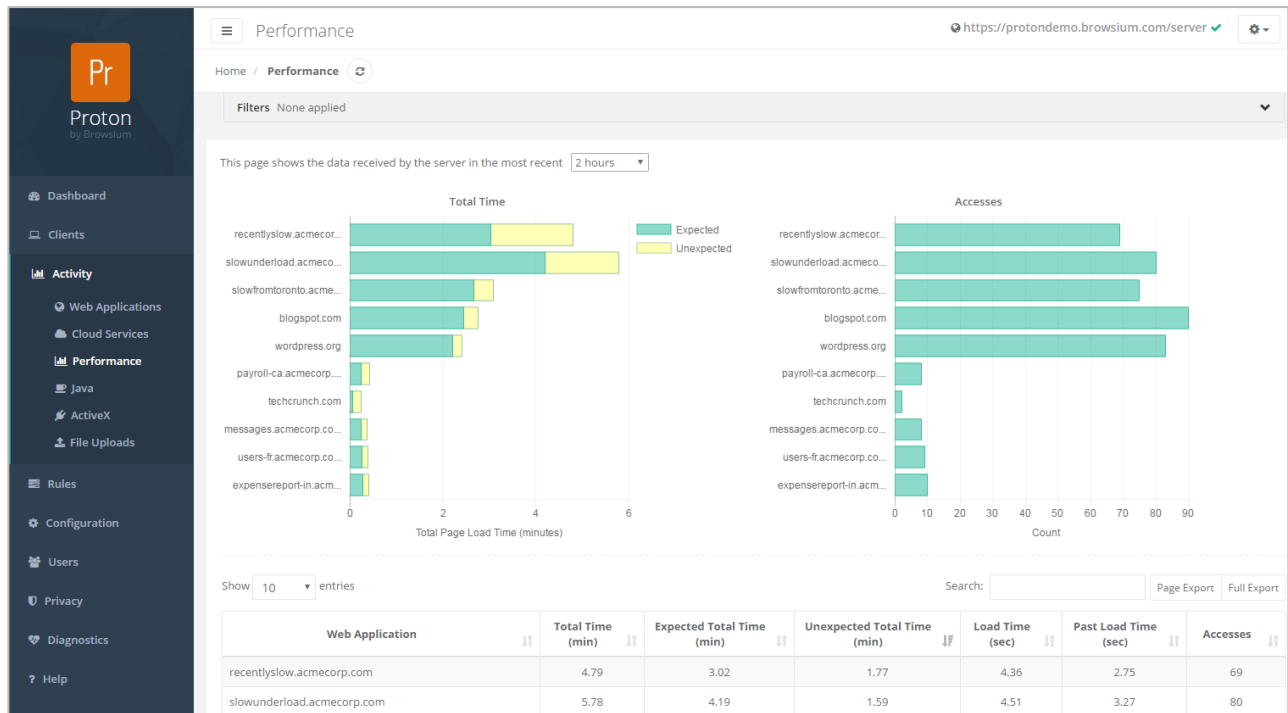

The charts on the main Performance page are designed to quickly provide insights about web application performance and activity in your enterprise. The Total Time chart compares 'Expected' performance (the historical average) to 'Unexpected' performance (performance that's slower than the historical average) for a recent time interval so you can immediately see which applications are currently hindering employee productivity. The Accesses chart shows you the number of accesses to each web application during the recent time interval, so you can focus your attention on the applications used by larger user populations where slow performance has a multiplier effect on the cost to your organization.

With Proton, you can sort and filter the data on many dimensions to target your monitoring and troubleshooting activities. For example, you can filter on just intranet applications, ignoring Internet websites, and sort on Total Time instead of Unexpected Total Time to see where your end users are spending the bulk of their line-of-business application work time. The following screenshot provides an example of this targeting in action.
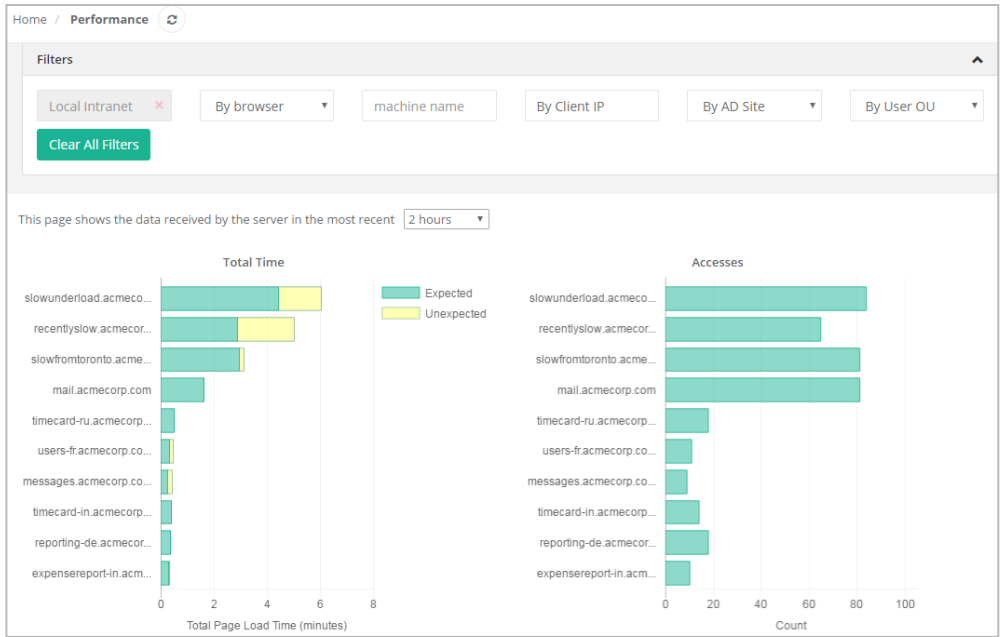
Selecting any web application in the chart or table will look up the activity detail for that web application, displaying the Performance History report.
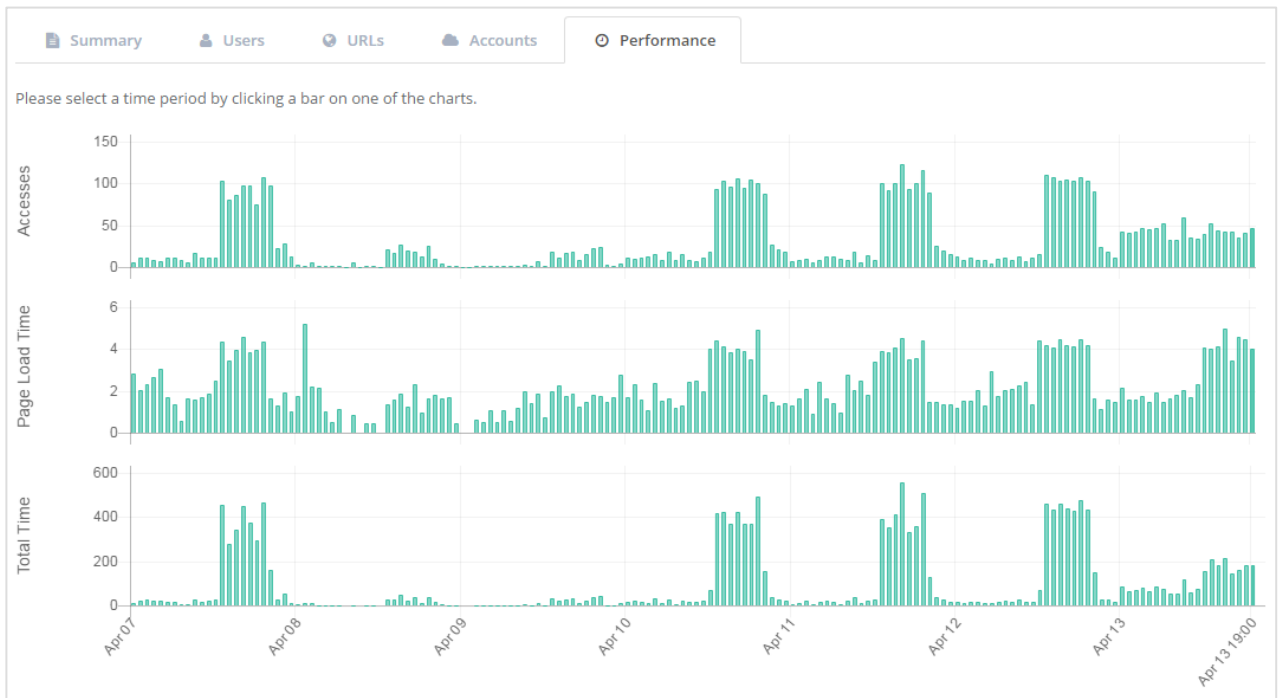
The Performance History report is a quick and easy way to recognize patterns in performance over time for any web application. On this page, you see a compound chart that displays several accesses, page load time, and total time at hourly intervals. Selecting any time period on the chart will highlight that period across all three charts and display a set of tables under the charts with the user and access details for that time period.

Because these charts are synchronized on the axis of time, it's easy to see your usage patterns for the selected web application – time of day, days of the week, along with corresponding performance of the web application. For example, if you see that a web application page load time tends to increase regularly as accesses increase, you might want to look further into whether that web application is scaled appropriately for its load. It's also easy to

restrict the data to slices of your enterprise by geography, network topography, organizational unit, browser, or individual and see how the patterns change. This can help you diagnose performance issues affecting specific individuals, locations, or business units.

After you have an interesting time slice identified by using the Main Performance page, the Access Details page contains the data you need to dive deeper and analyze the issue in more detail. While traditional performance analytics approaches look solely at server and network conditions, the data provided by Proton can uncovered previously hidden insights, such as:

- Is the version of Java loading for this page causing performance problems?
- Are legacy ActiveX controls degrading the end user experience?
- Are script errors in specific web pages causing significant delays and application time-outs?

In addition to the details for a given web application, Proton offers an even greater level of detail for each page access by simply clicking on any URL value in the Web Application Details page.

Optimize your web application performance today

Enterprise reliance on browser-based applications will only increase as legacy client/server applications are retired and more business-critical workflows move to intranet and cloud-based web applications. Troubleshooting and fine-tuning your web application performance is an essential element of optimizing your end user services and improving your company's bottom line. Now you can understand the performance of your critical web applications at a granular level to effectively manage web application performance with Browsium software.

Why wait? Start collecting actionable data and analytics about your web application performance. Take Proton for a TestDrive today or learn more about Browsium Proton and Browsium's browser management suite.

browsium

Browsium, Inc.
8201 164th Ave. NE, Suite 200
Redmond, WA 98052
www.browsium.com
+1.425.285.4424