



Real User Monitoring

End Network Blind Spots with
Zscaler Digital Experience (ZDX)
Real User Monitoring

Executive Summary

For modern IT organizations, the “blame game” is a daily reality. When a critical application slows down, the network is the first suspect, security policies are scrutinized as bottlenecks, and the Service Desk is buried under a mountain of vague “it’s slow” tickets. Traditional monitoring tools often lack the crucial evidence to pinpoint the true root cause, leading to frustrating, time-consuming war rooms and a long “Mean Time to Innocence.” Zscaler Digital Experience (ZDX) Real User Monitoring (RUM) fundamentally changes this dynamic. By capturing performance data directly from the end-user’s browser, ZDX RUM provides complete visibility into the entire digital service delivery chain, from the user’s device and “last mile” network to the application backend, empowering Service Desk to triage in seconds, Network Security to validate policy impact, and NetOps to instantly identify bottlenecks, definitively prove network health, and reduce Mean Time to Resolution (MTTR).





The Challenge: Blind Spots in a Modern Network

It's a scenario every IT team knows too well. A high-priority ticket arrives: "The CRM is slow for the entire sales team."

- **The Service Desk** spends forty minutes on the phone asking the user to clear their cache or restart their router, having no visibility into the actual session.
- **NetOps** checks the WAN links and sees everything is green, the core network devices also show no errors, yet the complaints keep coming.
- **Security** is pulled into a war room to defend whether SSL inspection, DLP, or CASB rules are "breaking" the app.

The problem is that visibility ends at the corporate network edge for traditional monitoring tools. In today's distributed world, the performance path includes countless variables you don't control:

- **The "Last Mile":** Is the issue a sales executive's unstable home Wi-Fi? Or a widespread outage with a specific regional ISP?
- **SaaS & Public Cloud:** Is the bottleneck within the SaaS provider's infrastructure or the public internet backbone connecting to it?
- **Client-Side Issues:** Is the problem caused by a new browser extension, an outdated device, or slow client-side page rendering?

Without data from the user's actual session, you're flying blind. You spend hours—or days—in triage calls, pulling logs and running traces, all while trying to prove the network isn't the problem. This reactive, defensive posture drains resources and damages IT's credibility.

We used ZDX RUM to show that a 3rd party application was taking too long (16 seconds) to display an order page. After the 3rd party application team saw the problem, they reduced it to 6 seconds, a 62% improvement.

– Large Healthcare Customer



The Solution: Complete Visibility from Browser to Backend

Zscaler Digital Experience (ZDX) Real User Monitoring (RUM) introduces the one piece of the puzzle IT teams have been missing: the user's perspective.

ZDX RUM is not another tool to monitor your infrastructure; it's a solution that illuminates the actual experience of your users interacting with that infrastructure. It complements your existing Network Performance Monitoring and Diagnostics (NPMD) tools by providing irrefutable, client-side evidence.

By integrating real user session data with ZDX's synthetic monitoring and cloud path probes, Service Desk, Security, and NetOps get a 360-degree view of performance. You can finally correlate what the user reports with what the data shows, moving from speculation to data-driven root cause analysis and validating that security does not come at the expense of productivity.

How It Works: Capturing the User's Reality

ZDX RUM captures the "ground truth" of every user interaction. By using lightweight browser extensions (Chrome/Edge), ZDX RUM tracks user sessions, page and Single Page Applications (SPA) load behavior, errors, and resource-level timing. This continuous data collection allows you to establish accurate performance baselines and configure automated alerts for any significant trend shifts in application performance.

This data provides a detailed, moment-by-moment breakdown of the page load process, including:

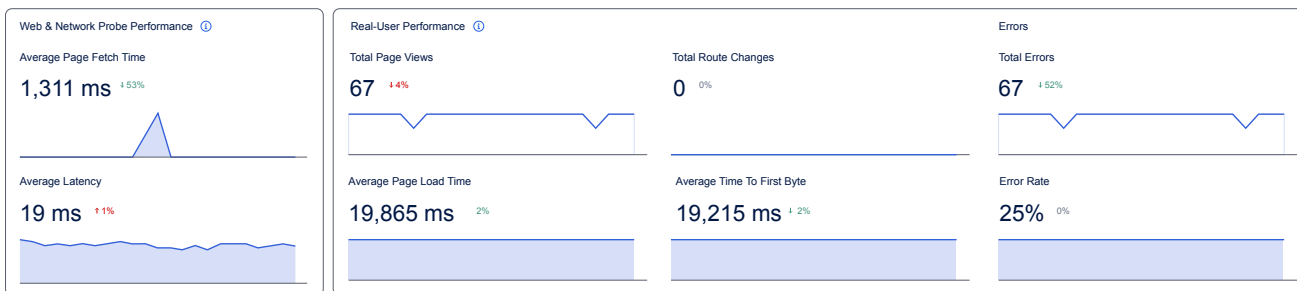
- **Network & Security Timings:** DNS lookup, TCP connect time, SSL/TLS handshake, and Time to First Byte (TTFB).
- **Frontend & Backend Timings:** A clear distinction between server response time and client-side browser rendering time.
- **Resource-Level Waterfall Charts:** A granular view of every single element on the page (API, route changes, images, scripts, CSS), showing exactly what is loading slowly and why.
- **Full Session Context:** Visibility into the user's environment, including their device type, browser, geography, and ISP.



Healthcare

Departments Zscaler Locations Geolocations User Groups Location Groups Last Mile ISPs Operating Systems Browsers

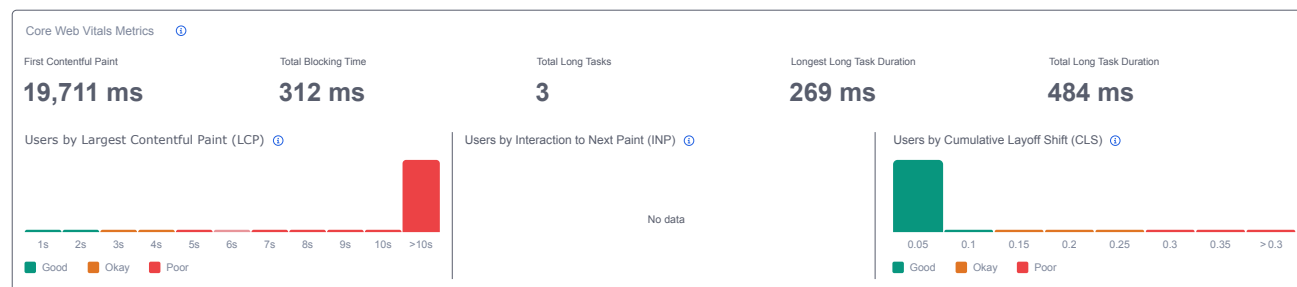
Summary Web Probe Performance Real-User Performance Errors Network Probe Performance



This information is correlated with active synthetic tests and cloud path probes directly from the user's device, giving you a powerful, unified dataset for troubleshooting.

Key Benefits Across the IT Organization

- **One-Click Triage for the Service Desk:** Stop wasting time trying to replicate issues. Agents pull user session data to instantly see if the issue is device-specific, network-specific, or a broad application error, reducing ticket escalations.
- **Security at the Speed of Business:** Security teams can validate the impact of Zero Trust Access (ZPA) and CASB policies. By monitoring "Long Task" duration and JavaScript execution, they ensure security tools aren't blocking the browser's main thread.
- **End the Blame Game:** Instantly see if latency is caused by the network, application server, or client-side rendering. Use waterfall charts as definitive evidence to share with other teams.
- **Drastically Reduce MTTR:** Stop wasting time trying to replicate user issues. Go directly to the user's session data to find the root cause in minutes, not hours.
- **Proactively Optimize Performance:** Use performance dashboards to identify poor performing applications, regions, or network paths before users start creating tickets.
- **Improve Cross-Functional Collaboration:** Share a common, data-rich view of performance with application owners and the service desk to eliminate finger-pointing and solve problems faster.



Key Differentiators: Why RUM for Zscaler?

ZDX provides unique advantages that make it an essential tool for any modern IT team.

- **Unified Real User & Synthetic Monitoring:** ZDX is the only platform that combines real user data with proactive synthetic monitoring and detailed cloud path probes in a single view. This allows you to understand baseline performance and immediately see the impact of real-world conditions on your users.
- **Deep, Resource-Level Troubleshooting:** Go beyond high-level metrics. ZDX RUM provides granular, resource-level waterfall analysis that helps you pinpoint the specific API call, third-party script, or oversized image that is degrading the user experience.
- **Native Integration into the Zscaler Zero Trust Exchange:** For organizations using Zscaler, ZDX is part of the same platform that secures your traffic. This provides a single pane of glass for security and digital experience, simplifying operations and providing unparalleled context.

Take Control of the Digital Experience

Stop defending the network and start proactively managing the end-to-end digital experience. Equip your entire IT team with the visibility they need to solve problems faster, collaborate more effectively, and become trusted guardians of user productivity.

See It in Action: Request a Personalized Demo of Zscaler Digital Experience Today.

REQUEST DEMO



About Zscaler

Zscaler (NASDAQ: ZS) accelerates digital transformation so that customers can be more agile, efficient, resilient, and secure. The Zscaler Zero Trust Exchange protects thousands of customers from cyberattacks and data loss by securely connecting users, devices, and applications in any location. Distributed across more than 150 data centers globally, the SSE-based Zero Trust Exchange is the world's largest inline cloud security platform. Learn more at zscaler.com or follow us on Twitter [@zscaler](https://twitter.com/zscaler).

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