

Shunra for HP Software™

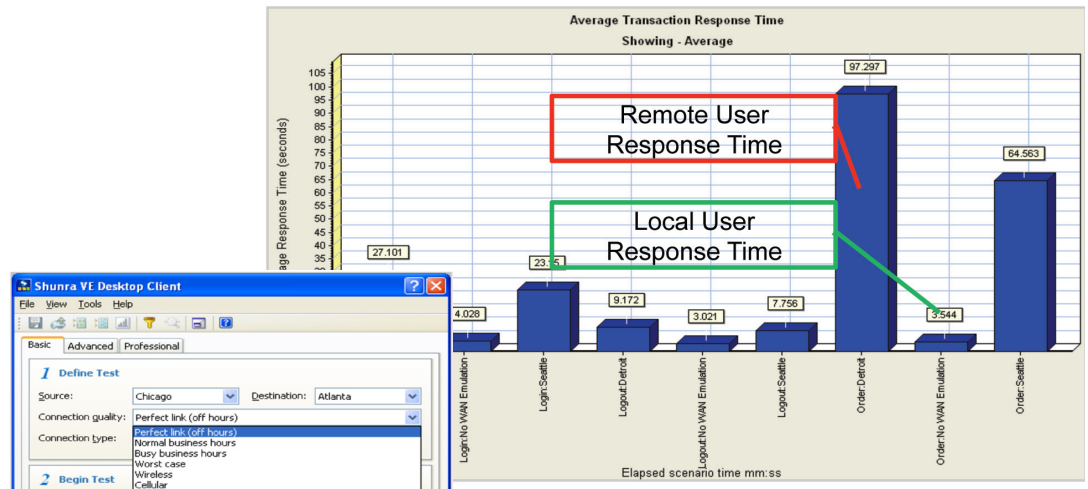
Enabling Confidence in Application Performance Before Deployment

ABOUT SHUNRA

When deploying applications across WAN, Web, Mobile or Cloud-based networks, risk mitigation and cost avoidance is paramount. Today, 80% of the costs associated with application development occur in remediating failed or underperforming applications after deployment, where the ineffective application has already had a negative impact on the end user or customer experience.

Shunra offers a proactive approach to application performance engineering (APE). The Shunra solution discovers, predicts, emulates and analyzes the performance of applications over real-world networks. As a result, Shunra delivers customized performance insight, enabling pre-production remediation and optimization, and confidence in application performance prior to deployment.

Shunra is the industry-recognized leader in Application Performance Engineering (APE), offering over a decade of experience with some of the most complex and sophisticated networks in the world.



Shunra for HP Software integrates seamlessly into HP LoadRunner and HP Performance Center, enhancing the accuracy of testing by incorporating real-world network conditions into the load and performance test environment. In addition, Shunra for HP features the ShunraPredictor analytics capability which automates reporting for test analysis, service level objective (SLO) attainment, and problem prioritization.

Shunra for HP Software is the only HP-certified solution specifically designed to accelerate and optimize application performance testing across WAN, Web, Mobile and Cloud networks. Shunra for HP Software improves an organization's ability to detect and remediate performance bottlenecks prior to deployment and accurately predict application behavior under real-world network conditions.

From within the familiar HP software interface, organizations worldwide are leveraging Shunra's unique performance engineering capabilities, including:

- Enabling each load generator to emulate a different network location's transaction response time, and reducing or eliminating reliance on remote load generators

- Aggregating test results into a single database for ease and completeness of analysis
- Extending testing scripts with a single click
- Automating reporting and analysis for Performance Engineers, Line of Business Owners, and other business constituent

Shunra for HP Software features easy configuration and use. It requires no script editing and places no limits on test scheduling. In addition, test results and data are automatically stored within HP results file and segregated by emulated location for precise, actionable analysis.

Real-World Network Conditions: A proven effective methodology for pre-production testing

The only way to ensure accuracy in pre-production testing is to incorporate real-world network conditions into the test environment. In the absence of real network constraints, application behavior under load and stress cannot be validated.

ABOUT APPLICATION PERFORMANCE ENGINEERING (APE)

APE is the discipline applied at every phase of the application lifecycle that ensures an application will be designed, implemented and operationally supported to meet its non-functional performance requirements. APE includes the roles, skills, activities, practices and solutions required to confidently deploy and manage application performance.

APE - BEST PRACTICES

- **Discover:** identify and record real-world infrastructure and network conditions, business processes, application topology and deployment scenarios
- **Test Set-Up:** incorporate network behavior, network emulation and business process automation scripts into the test environment
- **Testing:** integrate with automation tools and enable single-user and multi-site/multi-user load testing
- **Analysis:** conduct thorough results analysis to identify potential bottlenecks and validate performance and SLO compliance
- **Remediation and Optimization:** implement recommend best practices to improve performance and calculate performance ROI

Shunra’s application performance engineering solutions enable precise reproduction of real-world network conditions in the pre-production lab, including:

- Jitter and packet loss patterns
- Asymmetric bandwidth
- Network Congestion
- Link failures

■ **Latency impact** – Latency causes transactions and sessions to stay open longer than they would on a LAN. Without incorporating the network effects of delay into a load test, memory usage, thread usage and other critical server resources can be understated.

■ **Bandwidth limitations** – Bandwidth limitations dictate how much data can be transferred in a given amount of time.

Bandwidth constraints affect transactions “in-flight,” causing them to take longer to complete and impacting important server resources.

■ **Network impact** – Where specific response time goals, or service level objectives, are being targeted, it is critical to incorporate the overall effect of the network into the testing process. Recreating actual network conditions allows for accurate assessment of impact on total response time and provides for precise analysis of response time across the client, network and server components. With this level of analysis, it is faster to diagnose and easier to resolve performance bottlenecks or transactions that violated established response time goals.

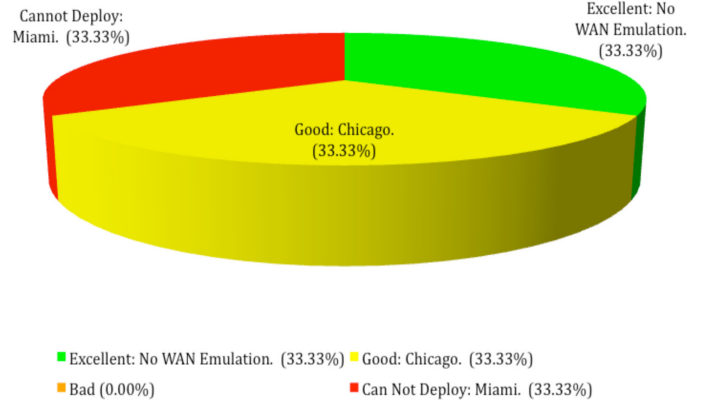
Features

- Windows 7/2008 operating system and 64-bit support for all platforms
- Bandwidth emulation up to 100Mbps or unlimited
- Granular IP Filtering (by protocol, port)
- Expanded packet capture (up to 1GB)

Contact Us

Call: 1.877.474.8672 | Email: sales@shunra.com | Visit: www.shunra.com

Locations SLO Compliance



Banking Login - Global Response Time (sec)

