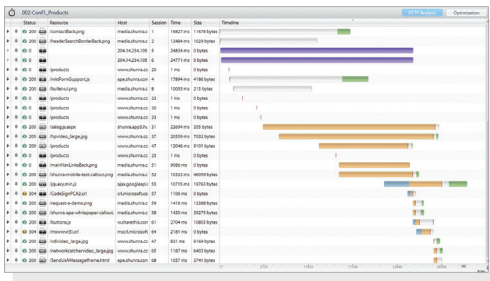
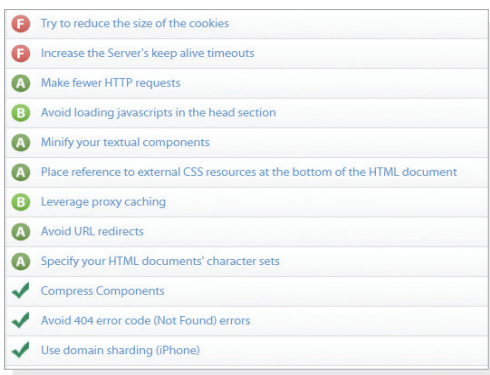


*While Shunra's PerformanceSuite is designed to enable precise testing scenarios that deliver highly accurate and reliable performance results, effective insight and analysis of those results is critical to affect meaningful and cost-effective application or infrastructure change. Shunra's Analytics Module empowers PerformanceSuite users with a comprehensive solution for analyzing poorly performing business transactions and drilling down into the root cause of performance issues. In addition, the Analytics Module delivers automated and customized suggestions for optimizing the performance of your application or website.*



### Web and Mobile Analysis

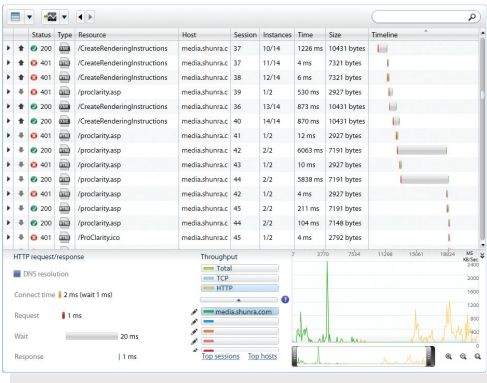
A waterfall diagram provides a visual look into individual resource sizes and load times, enabling rapid analysis of transaction response times and the ability to quickly identify areas for optimization. These deep dive capabilities provide visibility into how the end user experiences an application or page load, including insight into client-network-server timing by sub-transaction. Whether analyzing web-based, mobile web-based or native mobile applications, this information is critical to understanding the end user's perception of performance and where optimization efforts need to be focused.



### Automated Optimization Recommendations

In addition to providing per-resource data through Web and Mobile Analysis, the Analytics Module delivers a transaction performance scorecard that automatically grades application performance and offers custom performance optimization suggestions based on industry-accepted and proprietary rulesets. These performance optimization suggestions are proven to improve the load time of mobile-optimized sites by nearly 20% and standard websites by up to 44% when view on an iPhone.

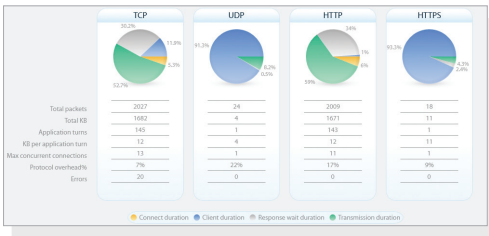
With Shunra's comprehensive analysis capabilities, reliable and fast identification of bottlenecks and specific recommendations for performance optimization help ensure your applications live up to the expectations of your users.



## Transaction Analysis

Shunra's ability to deliver enhanced performance information on each transaction allows PerformanceSuite users to quickly isolate the root cause of performance problems. Shunra's Analytics Module includes the following reports to enable rapid analysis and problem diagnosis:

- A transaction analysis report that shows how resource intensive a transaction is and enables comparison with other applications that are consuming the same network resources.
- A Bandwidth Bottleneck Report identifies throughput and bandwidth utilization for each transaction.
- Shunra's Network and Application Error Report highlights all application-related errors and isolates problem areas such as caching issues, unutilized buffer size and other functional problems for remediation.
- A breakdown analysis of infrastructure shows the duration of time an application spends on the server, the client and the network, helping to pinpoint bottlenecks in the application infrastructure.



## Network Traffic Analysis

The Analytics Module also helps PerformanceSuite users to diagnose and resolve application and performance issues in a multi-protocol network environment, presenting a comprehensive and high-level overview of network traffic. This overview can be drilled-down into to gain access to detail information.

#	Name	Status	Duration	Start Time	Stop Time	Description
01	Connect	Success	00:00:15	16:01:00	16:01:15	Connect to Account Server
02	Login	Success	00:00:10	16:01:19	16:01:30	Login to Account
03	Request	Success	00:00:23	16:01:33	16:02:01	Request Recent Transactions
04	Log Out	Success	00:00:04	16:02:04	16:02:09	Log Out of Account Server

## Transaction Management

The Analytics Module includes transaction management agents that run on the same platform as your script/load tool generators. A flexible API allows PerformanceSuite users to leverage and re-use scripts, and integrate transaction management and packet capture with third-party tools such as HP LoadRunner, Borland SilkPerformer and IBM Rational.

With Shunra's Analytics Module, it is easy to incorporate flexible packet capture buffers into these automated test sessions and automate the correlation of business transactions with the resulting packets traversing the network. This transaction data is captured in an industry-standard format for further analysis with PerformanceSuite or can be easily imported into additional third-party tools.

# Application Performance Engineering



## Shunra Analytics Module

Visit [www.shunra.com](http://www.shunra.com) and request to be contacted. Or contact Shunra directly at **1.877.474.8672** or **1.215.564.4046** (worldwide offices listed below).