



Better Monitoring with WebWatchBot Series

Advanced Monitoring: Web Transactions

Knowing a website's weak points is the key to maximum uptime, and the only way to identify weakness is through comprehensive monitoring of multiple web pages on a site. If a website is a chain, then each web page is a link in that chain; and, as the adage goes, a chain is only as strong as its weakest link.

Monitoring a website by stepping through a pre-recorded transaction is the most comprehensive test one can perform on a website at the application level. Monitoring transactions provide coverage of the most important pieces of a website: customer response forms, shopping carts, data-entry forms, etc.

Transactions are little more than a set of web pages that are repeatedly executed in order. Each "step" in the transaction is a web page that can be static or dynamic with web forms, images, authentication and anything and everything else a web page contains.

Transactions measure user experience through monitoring accuracy of web page output and responsiveness of individual steps and the transaction as a whole.

As data is collected over time, important metrics are gathered: response time delays with individual steps, response time delays between steps, identification of where and when bottlenecks occur, capturing output from web pages that produce errors (HTTP 404, HTTP 500, etc.), and content verification.

Transaction monitoring should begin during development of a website and continue to evolve through the life of a website. As each new web page is developed it should be added to the transaction for immediate and continued testing.

As the site grows, pages can be broken out into groups to isolation potential problem areas. For example, a group of "About Us" and "Contact Us" pages, which are normally static, should be set up to monitor for content verification with less emphasis on responsiveness. Also, a group of shopping cart pages should be set up to monitor for content and error verification and most importantly responsiveness. As the shopping cart is monitored over time, a trend will emerge, pinpointing the slowest pages that may need to be revisited for performance enhancements.

Strengthen each link in the chain by defining a monitoring strategy that includes transaction monitoring. Identify crucial areas of a website that need continuous transaction monitoring that over time will provide metrics for improving website performance and the user experience. Start early in the development phase of a website and reap the benefits of the information gathered.