



## What's New in WebLOAD Professional 8.3

Version 8.3 introduces a new analysis and reporting tool, together with major usability and functionality enhancements to the IDE and Console.

### WebLOAD Analytics - New Analysis & Reporting tool

With a completely new user interface and built on the latest Java technologies, WebLOAD Analytics provides a wealth of reporting and analysis functionality, enabling you to generate professional performance reports:

- The Report Templates Gallery includes a repository of predefined report templates that can be altered to fit your specific needs
- New Report Templates can be created with the Jasper iReport Designer
- Customize report content and layout through parameters (i.e. title, sub-title, logo) and filters (e.g. time filter)
- New measurement statistics: Transactions Per Second, Percentiles, and Thresholds.
- Print and Publish reports to 3<sup>rd</sup> party formats such as HTML, PDF, RTF, CSV and XLS (Excel)
- Support for regression reports, comparing several load sessions
- Portfolio management – assign reports to a portfolio and generate, print and publish them as a single report
- Generate reports per specific session script
- Custom Reports – select any performance measurement to appear in your report
- Extensive command line interface for batch activation

### WebLOAD IDE Enhancements

#### 1. Recording and Recording Options Enhancements

- The browser view is now available while editing the script showing the recorded pages (and their DOM as well, in the DOM view) during the recording and after it.



- The automatic proxy settings for recording have been enhanced to cover all options available in Microsoft Internet Explorer and Mozilla Firefox browser proxy settings.
- A pause recording command is introduced allowing for easy 'pause' and 'resume' of the recording session.
- WebLOAD IDE now has a recording toolbar. This toolbar will float over the browser window during recording, so there's no need to go back and forth between the browser and WebLOAD IDE.
- WebLOAD IDE will now clear your browser's cache before you start recording. If necessary, this behavior can be changed so the cache contents will be retained.
- WebLOAD IDE will now open a new browser window for each recording session.
- Recording of POST content types was modified – unknown content types will be recorded as DATA blocks and not as FORMDATA.
- WebLOAD IDE supports recording using the new Firefox 3.0.
- The Correlation Engine supports additional settings for its Correlation Rules:
  - Ability to correlate exact matches only.
  - Ability to correlate only values that have a minimum length.

## 2. Editing Enhancements

- A single 'Start Edit Mode' command has replaced the 'Visual Editing' and 'JavaScript Editing' commands, enabling a one-click move from Run Mode into Edit Mode. While in Edit Mode, you can still select between two views of your script: Visual Agenda and Full Script.
- When the script is not editable, (for example in the Visual Agenda view), its background will be grey to indicate that it is read-only.
- The Agenda Tree was enhanced to support multiple levels of hierarchy. This will be used to place all nodes between Begin and End Transaction in a lower level of the hierarchy, thus making the tree more readable. This also applies to the Execution Tree, shown during debugging.
- The Agenda Tree nodes for Begin and End Transaction now contain the names of the transactions.

## 3. Debugging Enhancements



- When in Run Mode, the name of the current project will be displayed in the window's title bar.
- A new message type is supported with the Message Building Block (in the Toolbox) – DebugMessage. These messages will be displayed in the IDE's Log View only and will not be displayed in the Console's Log View during the actual Load Test.
- When running a script in the IDE, you will be able to stop it in the middle of execution in one of the following ways: the Stop Execution command will stop the script in a graceful way, executing the TerminateClient and TerminateAgenda functions, while the Abort Execution command will cause an immediate halt without executing these functions.

#### 4. **Multiple WebLOAD IDE instances**

Working on more than one Agenda script at the same time? It is now easy to do by opening another instance of WebLOAD IDE. All instances can be used not only to edit the scripts, but also for playback.

#### 5. **Concurrency Support**

Designed for test scripts for websites using AJAX – It is now possible to specify for WebLOAD which HTTP requests to perform in parallel with others, simulating the way web browsers use multi-threading to send requests to the web server in a concurrent manner.

#### 6. **Smart Sleep**

You can set the maximal elapse time for transactions and for an Agenda Round. If the actual transaction or Round time will be smaller than this maximal elapse time, WebLOAD will wait (Sleep) the necessary extra time. This extra Sleep will not be taken into account by the relevant timers (the transaction timer and the Round Time timer). This extra Sleep time will be affected by the Sleep Time Control settings in the Agenda options. Defining Smart Sleep is done as follows:

- For transactions – the last optional parameter of **BeginTransaction** accepts the value in milliseconds for the total elapsed time of the transaction.
- For Rounds – use the **wGlobals.ElapsedRoundTime** flag in InitAgenda (only) to set the total Round elapsed time.



### 7. **Enhanced Access methods to an external Parameters File**

The new `wInputFile` object API has replaced the old API that was used to access the external parameters file. The new API (which is also used by the `GlobalInputFile` Building Block) allows single or multiple Agendas running on single or multiple load machines to access the same parameters file in a synchronized manner. This API also supports cyclic and random access to the file and allows each Virtual Client to determine when it will release the values previously read from the file to be used again by other VCs.

### 8. **New and Enhanced Building Blocks**

The following Building Blocks were enhanced to support new functionality:

- End Transaction – you can now specify the failure reason for the transaction in a single command.
- Message – to support `DebugMessages`, as described above.
- DefineConcurrent & ExecuteConcurrent – to support concurrency of HTTP requests, as described above.
- GlobalInputFile – was enhanced to support the new access methods to a parameters file, as described above.
- Verification Building Blocks (WS – Single, WS – Multiple and Flex – AMF) were enhanced to return a proper error code, as defined by the user. Their success message will be logged only in the IDE's Log View, using the new `DebugMessage` function.

### 9. **Adobe Flex Add-on Enhancements**

WebLOAD's innovative Adobe Flex Add-on was improved to support the following functionality:

- Correlation of Flex messages – WebLOAD IDE automatically correlates Flex AMF messages during recording.
- WebLOAD IDE's HTML View is available for Flex Agendas also during recording and editing of the Agenda.
- Automatic support for Adobe `IExternalizable` objects - the `ObjectProxy` and `ArrayCollection` objects will be represented in the WebLOAD Agenda as JavaScript elements.



## WebLOAD Console Enhancements

### 1. Load Test Monitoring

- The chart area, showing collected performance measurements during load test execution (and also for previously saved load sessions) was enhanced with better look & feel and additional functionality:
  - Selected measurement in the chart is highlighted.
  - Enhanced coloring and marking for each measurement.
  - The timeline (X-Axis) values can be toggled between relative elapsed seconds, relative time and absolute time. This feature is currently accessible from the Global Options dialog only.
  - The grid below the chart now contains more statistics for each measurement: min, max, average and standard deviation.
  - New zoom-in feature enables focusing on a specific segment of the Load Session.
  - Tabular view – shows the actual contents of the chart in a separate grid.
  - Ability to create a new integrated report from an existing set of measurements displayed in the chart.
- When adding measurements to display, the measurements tree is now ordered alphabetically and the measurements are grouped into meaningful groups, enabling better orientation in the vast amount of available measurements.

### 2. Transactions Dashboard Enhancements

The Transaction Dashboard view has been enhanced to support more statistics for each transaction and now includes a chart together with the table.

### 3. Load Test Definition

- The WebLOAD Wizard has been enhanced in several places to be more clear and precise about the steps necessary to create a load template.
- The name of the Cruise Control Wizard was changed and it's now called 'Goal-Oriented Test Wizard'. Along with changing the names, several enhancements were made to the wizard, making it more user-friendly and easy to use.
- The Performance Management Manager (PMM) wizard will now ask for credentials when trying to use it to monitor a Windows machine (if the current user doesn't have administrative rights on that machine).



- The Load Profiler dialogs will now show realistic graphs, based on the data entered.

#### 4. Load Test Execution

- Any virtual client can be stopped in the middle of a load test, by using the **StopClient** command from within the script of the Agenda.
- You can control whether or not to clear the cookie cache for each virtual client at the end of each round. Use the **wiGlobals.ClearCookiesAtEndOfRound** flag to do this.

#### 5. New measurements

WebLOAD now collects TPS (Transaction Per Second) statistics for all transactions defined in the Agenda. For each transaction you will be able to monitor Successful / Failed / Total <Tx-Name> TPS. TPS for the successful instances of all transactions will also be shown as part of the Transaction Dashboard.

#### 6. Enhanced Functional Verifications

The text search functional verification, available in the Console's Agenda Options, is now enhanced to support separate severity levels for each searched string individually.

## HTTP Protocol Enhancements

### 1. Kerberos Support

WebLOAD now supports Kerberos for authentication of HTTP sessions, together with the already supported NTLM protocol. Selecting Kerberos as the authentication protocol can be done from the Authentication tab of the Options dialog, in both WebLOAD IDE and the Console.

### 2. New and Improved HTTP Protocol Flags

- Some web servers, when working in conjunction with a Load Balancer, may return a response's packet with no content-length and with no data. WebLOAD used to treat this as end of message. A new flag was added, **wiGlobals.HTTPReceiveRetries** (with default value of 3), to allow WebLOAD to try and receive more packets before concluding that it's the end of the message.