

Parameterizing dynamic tests

When recorded requests are replayed during a test run, some of them need to be modified before issuing. The process of replacing fixed recorded values in the requests with dynamic values is called parameterization. Most modern websites, except those that merely service static pages and images, are dynamic. Parameterization is an essential part of performance testing such websites. The dynamic values can be derived from the following sources:

1. Calculated on-the-fly based on intrinsic rules, built-in a load testing tool.

Example: cookie correlation and autocorrelation (see [Cookie Correlation](#) and [Autocorrelation](#)). This type of parameterization, called correlation, works automatically. Its effectiveness depends on the quality of the load testing tool. Some tools can miss necessary correlation rules, and as a result, a test will generate errors or more work is required to create manually missing parameters, as noted in the next item. StresStimulus supports autocorrelation in all major web platforms.

2. Calculated on-the-fly based on rules created by a test analyst.

Example: extracting server-based data from responses (see paragraph [Parameterization with Server Data](#)). Discovering such rules can be an elaborate process that depends on the quality of the load testing tool. StresStimulus has various features to simplify manual parameterization, such as Parameter Finder and Auto-Configurator.

3. Fetched from external datasets or generated in real-time.

Example: parameterization with data sets and data generators (see paragraph [Parameterization with User Data](#)). StresStimulus has data generators for building all major data types.



Evidence that some parameters are missing

- Test Case Verify command returns errors or warnings.
- After the test run is complete, the error detail report is not empty.
- It is expected that recorded user's actions should modify backed data (e.g., database information, log file entries, file updates, communication messages), but after the test run, such changes did not take place.

Types of Dynamic Requests

Manual Parameterization

Automatic Parameterization