

Performance testing gives you an overview of system behavior when it is being used by a specific user group. Performance tests aim to determine the system response times experienced by the user and the potential system load capacity. Various types of performance tests are used to define response times. Polteq is widely knowledgeable and experienced with different performance testing tools. Polteq is fully independent and has no preference for specific tools, therefore we only apply tools which are most appropriate for each individual assignment.

Steps for a successful performance test

Our method is based on the following structured approach:

Define the assignment

Based on our experience, we will suggest one or more types of performance tests that meet your requirements and needs. The test will focus specifically on potential risks that you've determined or anticipate. Consider the following:

- high response times of the applications;
- concerns about the response times of the application during high load;
- long processing times of business logic;
- insufficient bandwidth;
- insufficient database connections.

Determine requirements and write a test plan

Before we execute a performance test, we determine the requirements for successful system functioning. Polteq helps you in setting realistic and concrete goals. We can help you all the way from designing the requirements to facilitating workshops with the appropriate stakeholders.

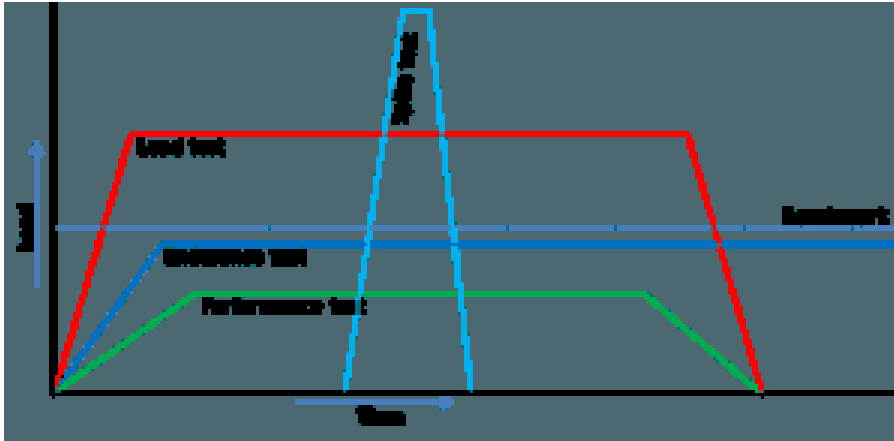
The test plan gives you a general overview of what type of outcome you can expect from the test, what it will deliver to you, and what will be the costs involved.

Test execution

During performance test execution the agreed types of tests are executed. Below you will find an overview of the most important tests.

Report and present results

When delivering performance test results we provide the summary of the accumulated data, as well as problem analysis including the cause and, where possible, recommendations for improvement.

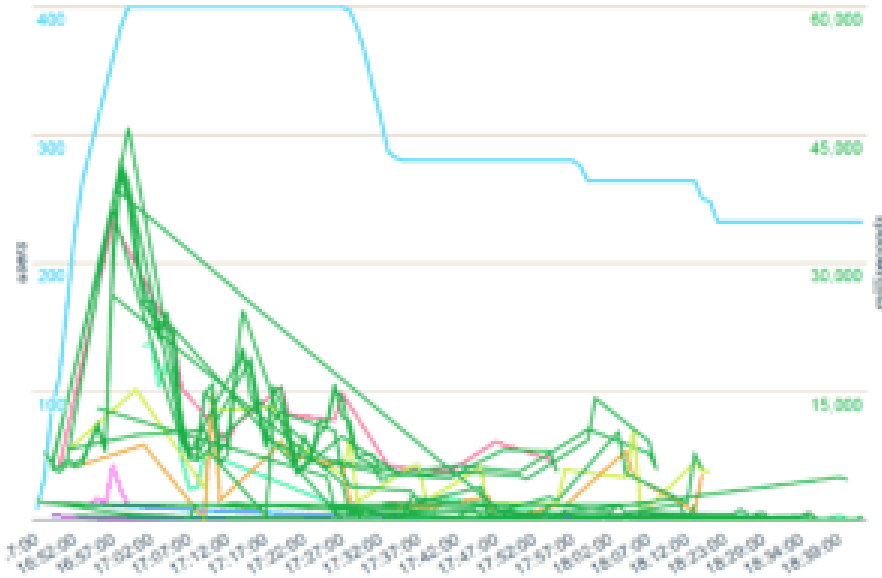


Performance test types

Two main types of test

Load test

In order to determine the load capacity of either an application or chain of applications a load test is usually applied. A load test is a two-sided test; it's an automated test mimicking user behavior while checking for the system response time and for errors. During this test one puts a predetermined user load on the system.



Load test

Performance measurement

In addition to the load test it is often recommended to measure system performance from the user experience perspective, therefore a functional automated test of the user actions is applied. This test completes end user's actions and measures the reaction times of the system. During this measurement, the load on the system is increased to the predetermined values to check whether user experience gets affected by the load.