**Report about conducted load test**

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**Application:** BlogEngine.NET version 3.2

**Environment:** Host machine where script was run + Virtual Machine where blog is deployed

**Test Environment configuration(RAM, CPU etc.):**

|  |  |
| --- | --- |
| **RAM** | 4096 MB |
| **CPU** | 1 Core CPU (Intel(R) Core(TM) i7-8665U CPU @ 1.90GHz 2.11 GHz) |
| **System Type** | Windows 10 64-bit |

1. **Why such testing was conducted:** To check system’s behavior for specific Admin actions.
2. **Test script description:** Script contains actions for Admin flow. Firstly “user” opens Home page, Logs In, after that starts loop which executes 10 times: Open Admin Page -> Open Users Page -> depending on current number of users -> Create User OR Delete User. After loop ends “user” will be logged off.

Diagram

Description automatically generated

1. **Tests:** 2 test runs.  
     
   **Test run preconditions:**

* 2 Admin users
* CSV file with user credentials
* Warmup actions before each test run (Log In, navigate through Blog pages, open Admin page, Log Out)

**Load Model:**

|  |  |
| --- | --- |
| **Users** | 2 |
| **Rump up time (s)** | 1 |
| **Loops** | 1 |

1. **Short summary on conducted tests:**

* In both test executions we can observe response time was stable and not growing during run.
* Expected load was created for each of 2 users (1 opening of Main Page, 1 Log In, 10 openings of Admin Page, Create User + Delete User in sum gave 10 transactions per user).
* No Server errors were observed during both tests.

1. **Detailed test results:**

**5.1)**

**A screenshot of a computer

Description automatically generated with medium confidence**

**A screenshot of a computer

Description automatically generated with medium confidence**

**A screenshot of a computer

Description automatically generated with medium confidence**

Server’s metrics:

A picture containing graphical user interface

Description automatically generated

Graphical user interface

Description automatically generated

**5.2)**

**A screenshot of a computer

Description automatically generated with medium confidence**

**Graphical user interface

Description automatically generated**

Server’s metrics:

Chart

Description automatically generated

A screenshot of a computer

Description automatically generated with low confidence

1. **Conclusion:**

* System handles with 2 concurrent Admin users, response time was not growing, throughput was stable during executions.
* In both runs execution took nearly the same time – 185-190 seconds.
* Longest response time was for Open Admin Page (4.0-4.3 sec)
* Empty places on graphs can be explained due to low load and high waits between transaction (from 2 to 4 second), probably at that moment Open Admin Page transactions were executing