Performance report

External Flow

blueriq

Disclaimer

The results in the following report have been achieved on a specific hardware, software and application combination. The results in this report may differ from results on other combinations of hardware, software, custom code and application settings. No rights can be derived from this document.

It is strongly recommended to perform appropriate performance tests on the application that is modelled with Blueriq before taking it into production.

Introduction

Performance testing is a type of testing intended to determine the responsiveness, throughput, reliability, and/or scalability of a system under a given workload.

This report provides an overview of the test results for the External Flow performance test for **Blueriq** with Redis session store. The purpose of this report is to give insight in the performance of a typical Blueriq application with a typical hardware configuration. This enables Blueriq customers to estimate the performance characteristics of a Blueriq application in production and to assess infrastructure adequacy.
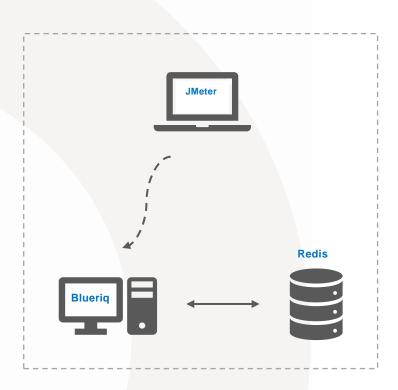
How to use this report
Testing and reporting on performance is complex since it depends on a large number of variables. In the documentation on the Blueriq Community you can find the test approach and assumptions for the tests. It contains the reference application, user scenarios, the test environment, the test methodology, key performance indicators and the acceptance criteria.

Hopefully, the results from this performance test can help you to estimate the hardware configuration required to support your application when "going live" to production operation.

Load testing is the simplest form of performance testing and its goal is to see how the software behaves under normal use circumstances. Except for the situations where we introduce new modules or make breaking changes to one of our existing ones, the load testing is the way to go for Blueriq in order to check the application's current shape.

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Test environment

Three separate virtual machines were used in this test: one for the Blueriq Runtime, one for the database server and one for the JMeter application which simulates the user load and runs the performance script.

JMeter machine:
- OS Windows Server 2016 Standard
- Intel® Xeon® CPU E5-2680 v2 @ 2.80GHz 2.79GHz (2 processors)
- 2,00 GB memory (RAM)
- 39,10 GB HDD

Blueriq machine:
Server hardware
- Intel® Xeon® CPU E5-2680 v2 @ 2.80GHz 2.79GHz (4 processors)
- 5 GB Memory
- 39,10 GB HDD

Server OS/AS/Database
- Windows Server 2016 Standard
- JBoss 7.2 EAP
- JAVA 1.8.0 Update 151

Redis machine:
- OS CentOS Linux 7 (Core)
- Intel(R) Xeon(R) CPU E5-2680 v2 @ 2.80GHz
- 2,00 GB memory (RAM)
- 16,00 GB HDD

Test results

The table below shows the results of all individual steps of the performance script. Please note that this test simulated a constant user load of 33 users during a one hour run. The scenario is also explained on the community page.

For each step (Key Performance Indicator) the following values are given:
- The T-value used for calculating the Apdex value (as defined on the Blueriq community in chapter 2)
- The Apdex value with the colour indicating the rating (as defined on the Blueriq community in chapter 2)

Key Performance indicator (Dutch)	Actions	T-Value (ms)	Apdex value R12.8	Apdex value R12.9	Apdex value R12.10	Apdex value R12.11	Apdex value R12.12	Apdex value R13.0
1.Authenticate	Login	500	1,00	1,00	1,00	1,00	1,00	1,00
2. Start project	Open shortcut Display dashboard.	500	1,00	1,00	1,00	1,00	1,00	1,00
3. Initiate dashboard externa flows	Init Prime Offer Init Fixed Rate Init Fast Track	500	1,00	1,00	1,00	1,00	1,00	1,00
4. Start dashboard external flows	Start Prime Offer Start Fixed Rate Start Fast Track	500	1,00	1,00	1,00	1,00	1,00	1,00
5. Load dashboard external flows	Load Prime Offer Load Fixed Rate Load Fast Track	1000	1,00	1,00	1,00	1,00	1,00	1,00
6. Apply for prime offer	Click to apply loan	1000	1,00	1,00	1,00	0,99	0,99	0,99

	Complete external flow End external Flow							
7. Enter personal details	Fill in first fields Fill in the rest of the fields and submit	500	0,99	0,99	1,00	1,00	1,00	1,00
8. Enter work details	Check the other credits field Fill in the rest of the fields and submit	500	1,00	1,00	1,00	1,00	1,00	1,00
9. Enter contact information	Enter data and apply for loan	500	1,00	1,00	1,00	1,00	1,00	1,00
10. Accept terms and apply for loan	Tick checkbox Click on Apply for Loan	500	1,00	1,00	1,00	1,00	1,00	1,00
11. Initiate loan external flow	Initiate	500	1,00	1,00	1,00	1,00	1,00	1,00
12. Start loan external flow	Start	500	1,00	1,00	1,00	1,00	1,00	1,00
13. Load loan external flow	Load	500	1,00	1,00	1,00	1,00	1,00	1,00
14. Edit personal data	Click on Apply for Loan	500	1,00	1,00	1,00	1,00	1,00	1,00
15. Apply changes	Apply changes	500	1,00	1,00	1,00	1,00	1,00	1,00
16. Confirm data is correct	Click Yes	500	1,00	1,00	1,00	1,00	1,00	1,00
17. Go to the request page	Click Next	500	1,00	1,00	1,00	1,00	1,00	1,00
18. Apply for 1 million euros	Sign up	500	1,00	1,00	1,00	1,00	1,00	1,00
19. Apply for smaller amount	Sign up Complete external flow End external flow	1500	1,00	1,00	1,00	1,00	1,00	1,00
20. Log Out	Log out	500	1,00	1,00	1,00	1,00	1,00	1,00

Conclusion

All the requests have response times under 100 milliseconds and an Apdex value located at 1,00.

As new 13.x releases will appear this document will be updated with new performance figures and possible explanation and analyses on the performance variations