



# 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.

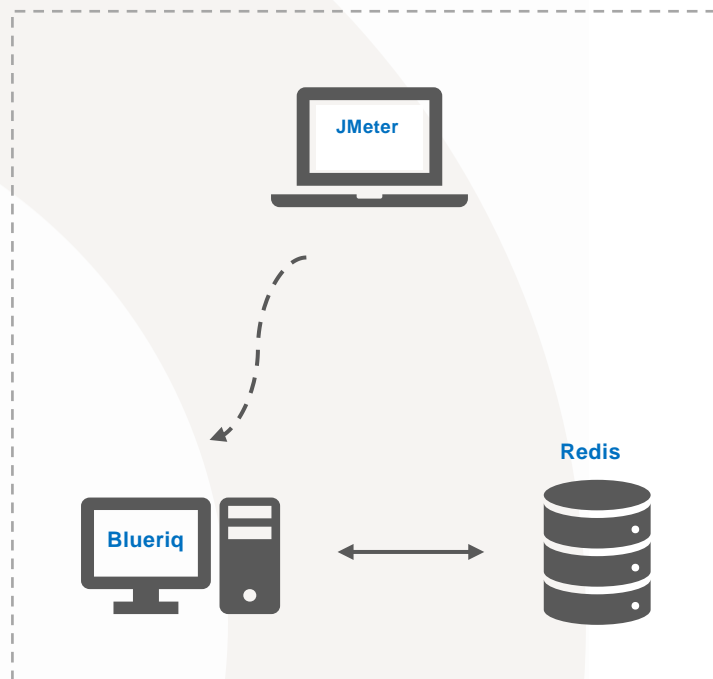
Hopefully, the results from this performance test can help you to estimate the hardware configuration required to support your application when “going live” to production operation.

*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.*



# 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
1. Authenticate	Login	500	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
3. Initiate dashboard external flows	Init Prime Offer Init Fixed Rate Init Fast Track	500	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
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
6. Apply for prime offer	Click to apply loan	1000	1,00	1,00	1,00	0,99	0,99

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

# Conclusion

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

As new 12.x releases will appear this document will be updated with new performance figures and possible explanation and analyses on the performance variations