HeCo stress tests Oct 18th 2022

The stress tests were conducted on the production site hecoinvest.org using JMeter.

Objective: to establish how big of an influx of visits to the site we can handle

Test scenario: user visits the home page a single time. We're trying to find out how many such visits, e.g. as a result of following a featured link, the site can handle in a minute.

JMeter configuration allows us to specify the number of simulated users accessing the site. We ran the test with increasing numbers, until the point was reached when the tests started returning errors (connection refused). JMeter files are saved in the github repository.

No of users	Avg resp time [ms]	Error %	Throughput [req/s]
300	240	0	6.0
400	242	0	8.0
500	259	0	10.0
550	265	4.18	11.0
600	262	12.83	12.1

Findings: Under the test conditions, the site can currently handle around 500 users accessing the home page in a duration of a minute, at 10 requests per second throughput. Beyond that availability errors start occurring. The average response time is under one second.

Next steps: Assessment of whether current site limits are fit for purpose. Since response time is good, scaling efforts should likely be on infrastructure level rather than application.