Performance Testing Report - Benchmarking Test

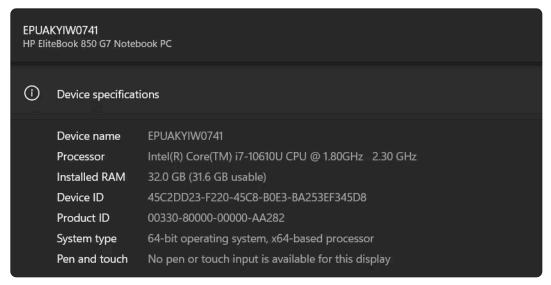
Tester: Yan Bareisha

Date: 24-08-23 07:25:20

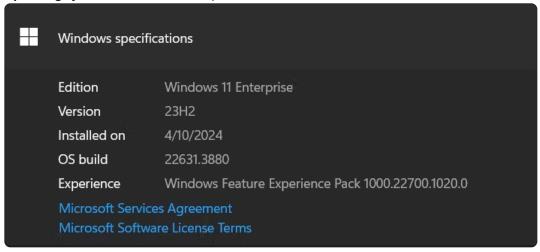
SUT:

• 1 Machine: CPU i7-10th generation

· Memory: 32GB



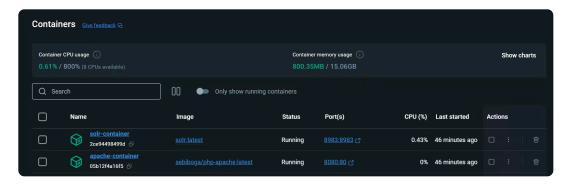
Operating system: Windows 11 Enterprise



Dockerized 2 containers

solr-container: 15.06GB RAM, CPU 0.38%
apache-container: 15.06GB RAM, CPU 0.01%

Containers:



IPs:

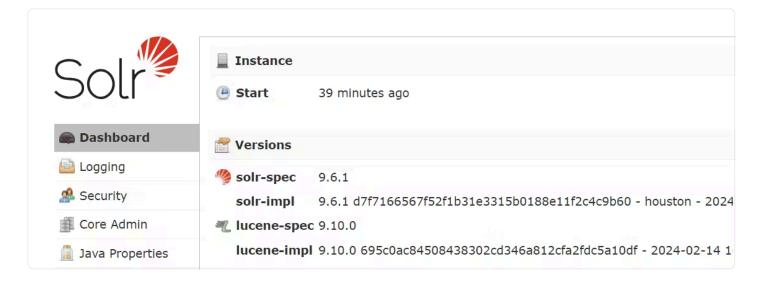
-apache-container --network mynetwork --ip 172.18.0.11 -d -p 8080:80 -v

-solr-container --network mynetwork --ip 172.18.0.10 -d -p 8983:8983 -v

Note: The machine is connected to the Internet via WIFI.

Application: Apache SOLR

Build Version: 9.6.1



Test scenario:

• Select 1 job out of 250.000.000 from apache SOLR

Performance test scenario:

· Workload: 25 VUsers;

• Ramp-Up: 60 sec;

• Duration: 15 min.

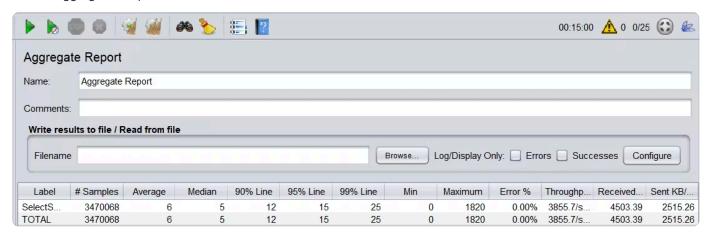
Test scope:

- Error rate is 0%;
- CPU < 85%

• Memory <95%

Test results:

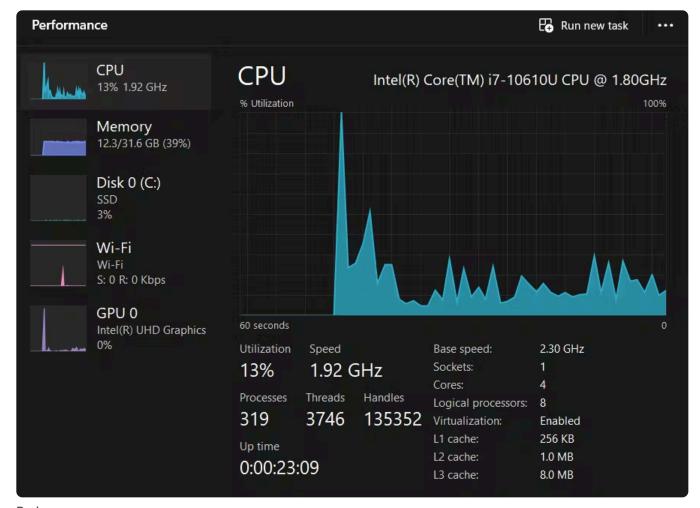
JMeter Aggregated Report:



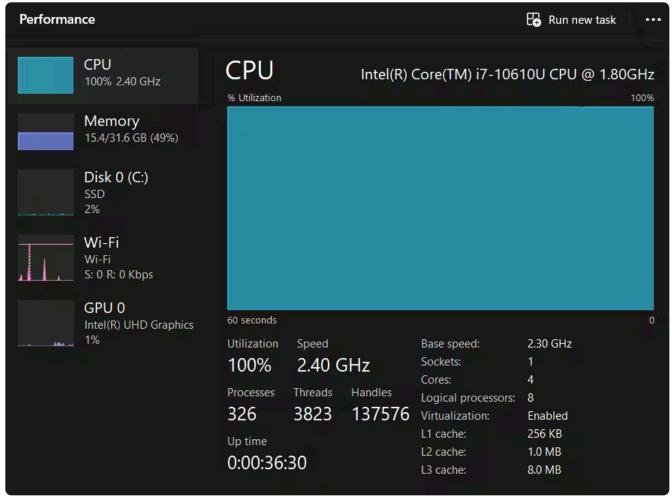
Docker



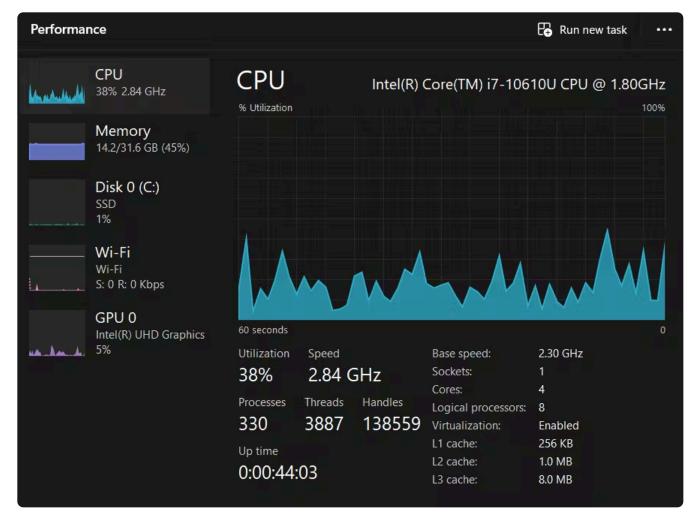
System Performance Before:



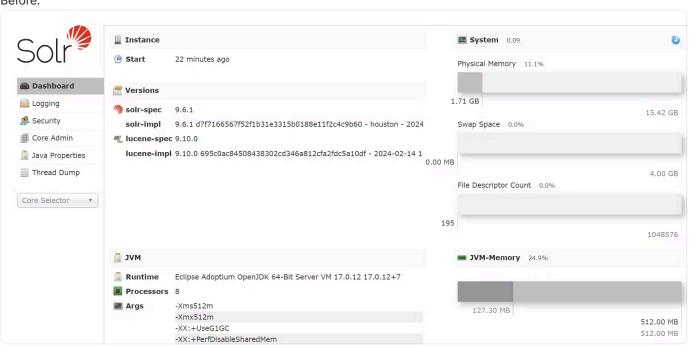
During:



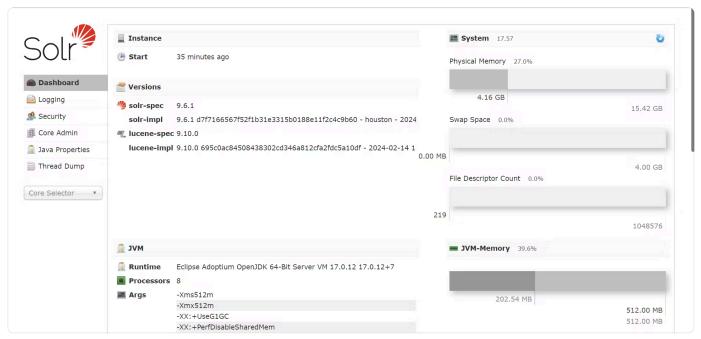
After:



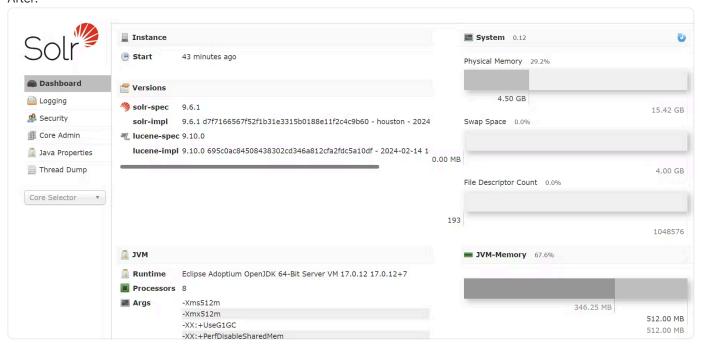
SOLR Before:



During:



After:



Conclusion:

- Error rate is 0%;
- CPU consumption is 100% during the test;
- Memory consumption <95%.

The benchmarking test showed that it is possible to run a 1-hour load test. CPU load should be taken into account.