


Performance Testing Report - Benchmarking Test Rerun: 100Vusers


 **Tester:** Yan Bareisha

Date: 2024-09-10 22:08:21 - 2024-09-10 22:24:34

SUT:

- 1 Machine: CPU i7-10th generation
- Memory: 32GB


EPUAKYIW0741
HP EliteBook 850 G7 Notebook PC



Device specifications

Device name	EPUAKYIW0741
Processor	Intel(R) Core(TM) i7-10610U CPU @ 1.80GHz 2.30 GHz
Installed RAM	32.0 GB (31.6 GB usable)
Device ID	45C2DD23-F220-45C8-B0E3-BA253EF345D8
Product ID	00330-80000-00000-AA282
System type	64-bit operating system, x64-based processor
Pen and touch	No pen or touch input is available for this display

Operating system: Windows 11 Enterprise



Windows specifications

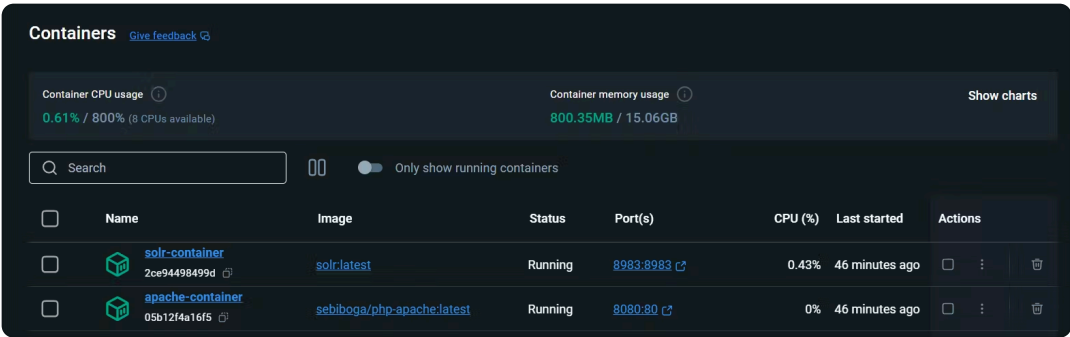
Edition	Windows 11 Enterprise
Version	23H2
Installed on	4/10/2024
OS build	22631.3880
Experience	Windows Feature Experience Pack 1000.22700.1020.0

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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



Dashboard

- Logging
- Security
- Core Admin
- Java Properties

Instance

Start 39 minutes ago

Versions

solr-spec 9.6.1

solr-impl 9.6.1 d7f7166567f52f1b31e3315b0188e11f2c4c9b60 - houston - 2024

lucene-spec 9.10.0

lucene-impl 9.10.0 695c0ac84508438302cd346a812cfa2fdc5a10df - 2024-02-14 1

Test scenario:

- Select 1 job out of 250.000.000 from apache SOLR

Performance test scenario:

- Workload: 100 VUsers;
- Ramp-Up: 60 sec;
- Duration: 15 min.



Test scope:

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

- Memory <95%

Test results:

JMeter Aggregated Report:

00:16:13  0 0/100 

Aggregate Report

Name:

Comments:

Write results to file / Read from file

Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Throughp...	Received...	Sent KB/...
SelectS...	1804838	50	2	8	13	30	0	149267	0.01%	1854.4/s...	2166.03	1209.55
TOTAL	1804838	50	2	8	13	30	0	149267	0.01%	1854.4/s...	2166.03	1209.55

Sample result:

Thread Name:Thread Group 1-32
Sample Start:2024-09-10 22:09:40 EEST
Load time:131945
Connect Time:1
Latency:0
Size in bytes:2092
Sent bytes:0
Headers size in bytes:0
Body size in bytes:2092
Sample Count:1
Error Count:1
Data type ("text"|"bin"|""):text
Response code:Non HTTP response code: org.apache.http.NoHttpResponseException
Response message:Non HTTP response message: localhost:8983 failed to respond

Response data:

org.apache.http.NoHttpResponseException: localhost:8983 failed to respond
at org.apache.http.impl.conn.DefaultHttpResponseParser.parseHead(DefaultHttpResponseParser.java:141)
at org.apache.http.impl.conn.DefaultHttpResponseParser.parseHead(DefaultHttpResponseParser.java:56)
at org.apache.http.impl.io.AbstractMessageParser.parse(AbstractMessageParser.java:259)
at org.apache.http.impl.DefaultBHttpClientConnection.receiveResponseHeader(DefaultBHttpClientConnection.java:163)
at org.apache.http.impl.conn.CPoolProxy.receiveResponseHeader(CPoolProxy.java:157)
at org.apache.http.protocol.HttpRequestExecutor.doReceiveResponse(HttpRequestExecutor.java:273)
at org.apache.http.protocol.HttpRequestExecutor.execute(HttpRequestExecutor.java:125)
at org.apache.http.impl.execchain.MainClientExec.execute(MainClientExec.java:272)
at org.apache.http.impl.execchain.ProtocolExec.execute(ProtocolExec.java:186)
at org.apache.http.impl.execchain.RetryExec.execute(RetryExec.java:89)
at org.apache.http.impl.execchain.RedirectExec.execute(RedirectExec.java:110)
at org.apache.http.impl.client.InternalHttpClient.doExecute(InternalHttpClient.java:185)
at org.apache.http.impl.client.CloseableHttpClient.execute(CloseableHttpClient.java:83)
at org.apache.jmeter.protocol.http.sampler.HTTPHC4Impl.executeRequest(HTTPHC4Impl.java:940)
at org.apache.jmeter.protocol.http.sampler.HTTPHC4Impl.sample(HTTPHC4Impl.java:651)

```

at org.apache.jmeter.protocol.http.sampler.HTTPSamplerProxy.sample(HTTPSamplerProxy.java:66)
at org.apache.jmeter.protocol.http.sampler.HTTPSamplerBase.sample(HTTPSamplerBase.java:1311)
at org.apache.jmeter.protocol.http.sampler.HTTPSamplerBase.sample(HTTPSamplerBase.java:1300)
at org.apache.jmeter.threads.JMeterThread.doSampling(JMeterThread.java:651)
at org.apache.jmeter.threads.JMeterThread.executeSamplePackage(JMeterThread.java:570)
at org.apache.jmeter.threads.JMeterThread.processSampler(JMeterThread.java:501)
at org.apache.jmeter.threads.JMeterThread.run(JMeterThread.java:268)
at java.base/java.lang.Thread.run(Thread.java:1589)

```

The screenshot shows the JMeter View Results Tree window. The top section has a 'Name' field with 'View Results Tree' and a 'Comments' field. Below this is a 'Write results to file / Read from file' section with a 'Filename' field, a 'Browse...' button, and checkboxes for 'Log/Display Only', 'Errors' (checked), and 'Successes'. A 'Configure' button is also present. The 'Search' section includes a search box, checkboxes for 'Case sensitive' and 'Regular exp.', and 'Search' and 'Reset' buttons. The main area is divided into two panes. The left pane, titled 'Text', shows a list of 14 'SelectSOLR' entries, each with a red star icon. The right pane, titled 'Response data', shows a stack trace for a failed HTTP response. The stack trace starts with 'org.apache.http.NoHttpResponseException: localhost:8983 failed to respond' and includes several lines of code from the Apache HTTP client library. The bottom section of the window shows a log of JMeter events, including thread finishing and test completion messages.

View Results Tree

Name: View Results Tree

Comments:

Write results to file / Read from file

Filename: Browse... Log/Display Only: ☒ Errors ☐ Successes Configure

Search: ☐ Case sensitive ☐ Regular exp. Search Reset

Text

- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR
- SelectSOLR

Sampler result Request Response data

Response Body Response headers

Find ☐ Case sensitive ☐ Regular exp.

```

org.apache.http.NoHttpResponseException: localhost:8983 failed to respond
    at org.apache.http.impl.conn.DefaultHttpResponseParser.parseHead(DefaultHttpResponseParser.java:141)
    at org.apache.http.impl.conn.DefaultHttpResponseParser.parseHead(DefaultHttpResponseParser.java:56)
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    at org.apache.http.protocol.HttpRequestExecutor.execute(HttpRequestExecutor.java:125)
    at org.apache.http.impl.execchain.MainClientExec.execute(MainClientExec.java:272)
    at org.apache.http.impl.execchain.ProtocolExec.execute(ProtocolExec.java:186)
    at org.apache.http.impl.execchain.RetryExec.execute(RetryExec.java:89)
    at org.apache.http.impl.execchain.RedirectExec.execute(RedirectExec.java:110)

```

312 2024-09-10 22:24:34,160 INFO o.a.j.t.JMeterThread: Stopping because end time detected by thread: Thread Group 1-66

313 2024-09-10 22:24:34,160 INFO o.a.j.t.JMeterThread: Thread finished: Thread Group 1-66

314 2024-09-10 22:24:34,957 INFO o.a.j.t.JMeterThread: Stopping because end time detected by thread: Thread Group 1-52

315 2024-09-10 22:24:34,957 INFO o.a.j.t.JMeterThread: Thread finished: Thread Group 1-52

316 2024-09-10 22:24:34,958 INFO o.a.j.e.StandardJMeterEngine: Notifying test listeners of end of test

317 2024-09-10 22:24:34,959 INFO o.a.j.g.u.JMeterMenuBar: setRunning(false, *local*)

318

00:16:13 0 0/100

View Results Tree

Name: View Results Tree

Comments:

Write results to file / Read from file

Filename: Browse... Log/Display Only: ☒ Errors ☐ Successes Configure

Search: ☐ Case sensitive ☐ Regular exp. Search Reset

Text

Sampler result Request Response data

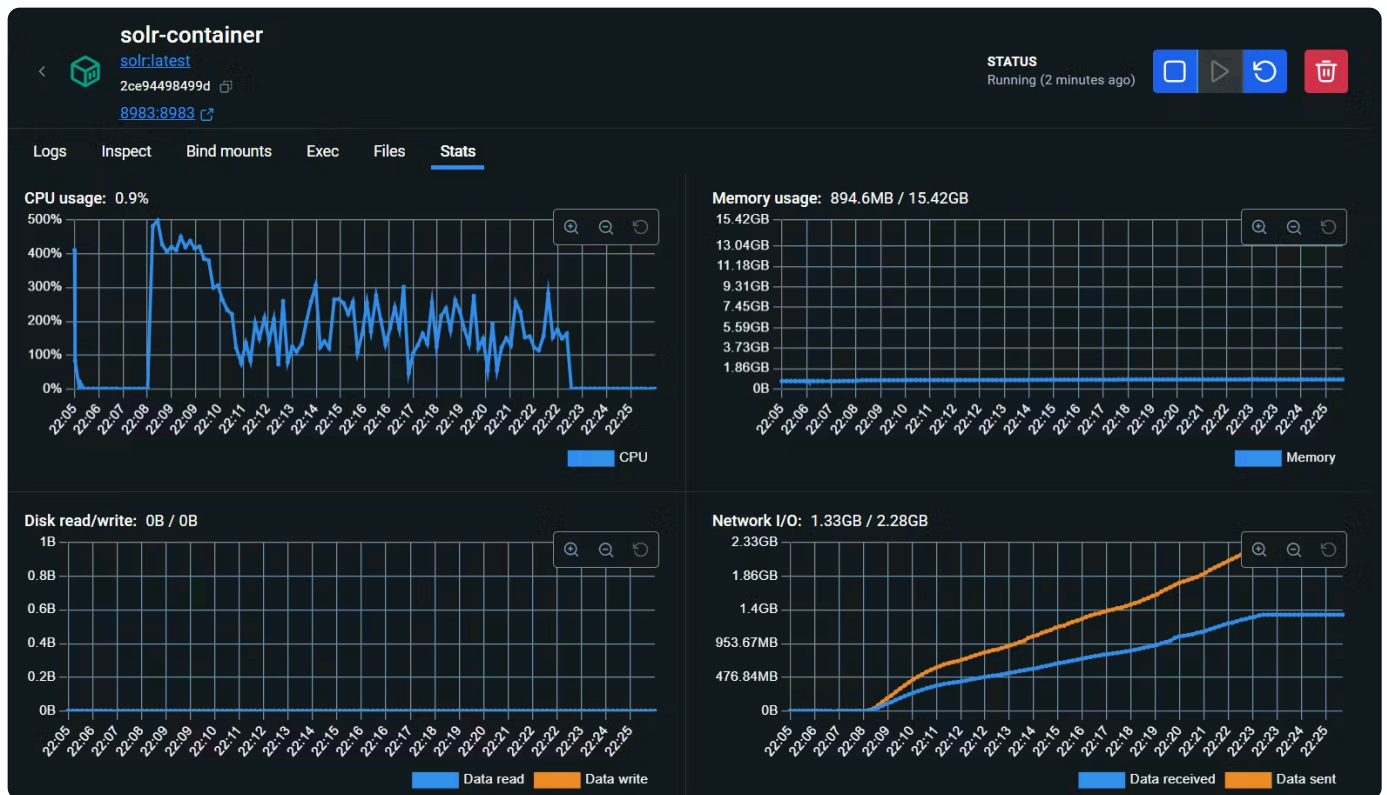
Request Body Request Headers

Find ☐ Case sensitive ☐ Regular exp.

```
1 GET http://localhost:8983/solr/jobs/select?_=1722927884388&indent=true&q=id%3A+%22d682f9-5e5b-4b96-958e-accffe711e42%22&q.op=OR&useParams=
2
3 GET data:
4
5
6 [no cookies]
7
```

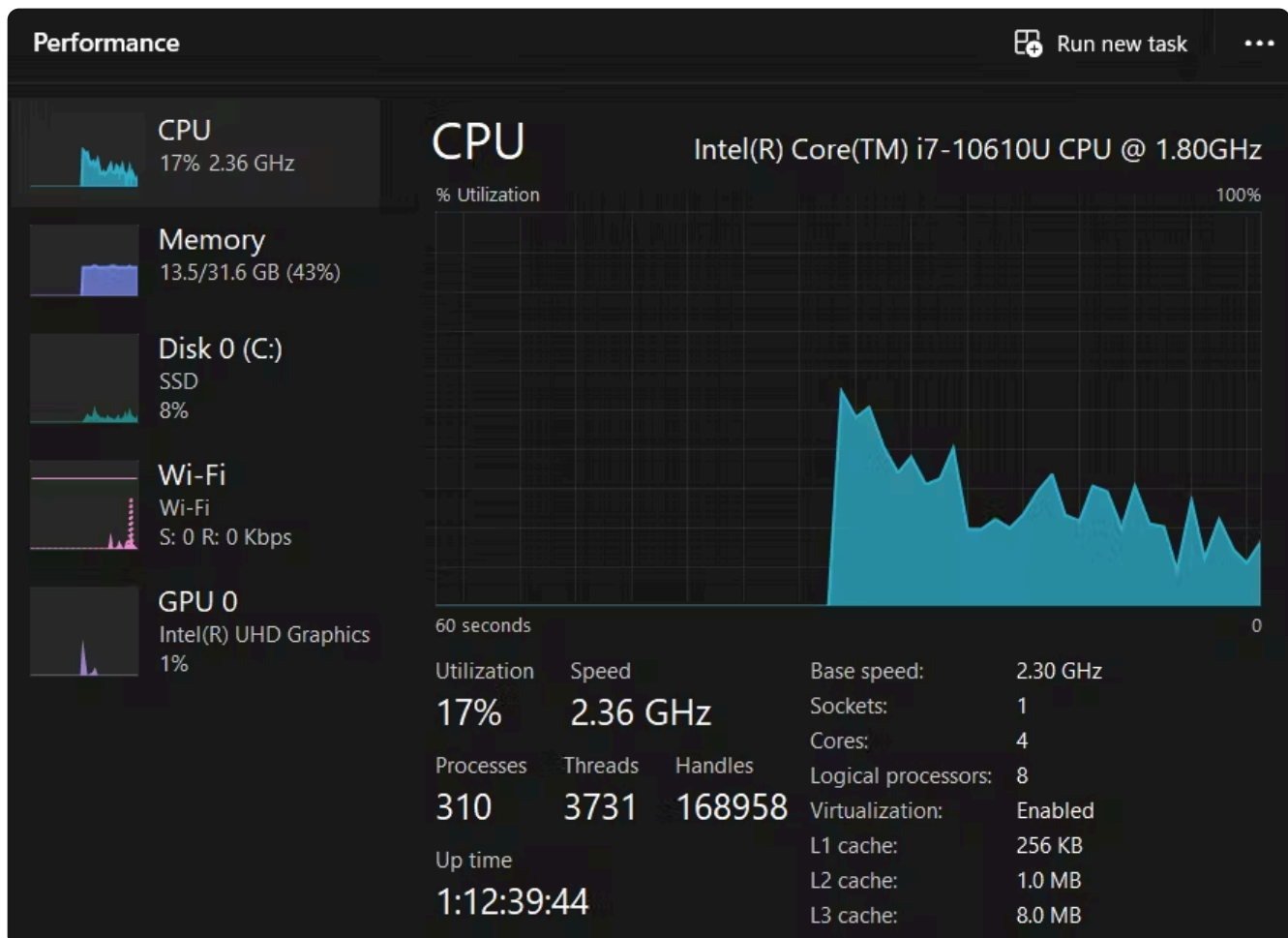
```
312 2024-09-10 22:24:34,160 INFO o.a.j.t.JMeterThread: Stopping because end time detected by thread: Thread Group 1-66
313 2024-09-10 22:24:34,160 INFO o.a.j.t.JMeterThread: Thread finished: Thread Group 1-66
314 2024-09-10 22:24:34,957 INFO o.a.j.t.JMeterThread: Stopping because end time detected by thread: Thread Group 1-52
315 2024-09-10 22:24:34,957 INFO o.a.j.t.JMeterThread: Thread finished: Thread Group 1-52
316 2024-09-10 22:24:34,958 INFO o.a.j.e.StandardJMeterEngine: Notifying test listeners of end of test
317 2024-09-10 22:24:34,959 INFO o.a.j.g.u.JMeterMenuBar: setRunning(false, *local*)
318
```

Docker

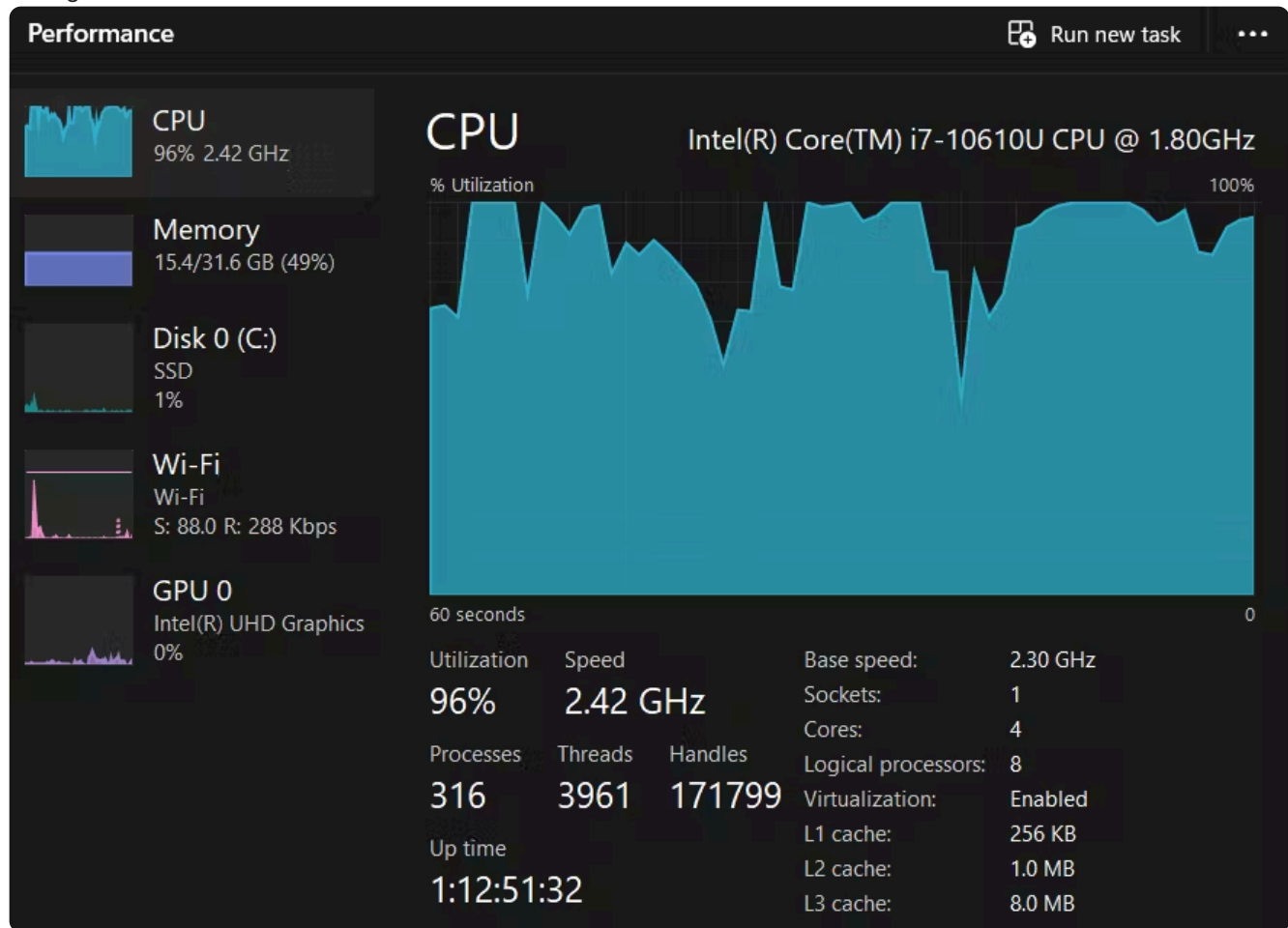


System Performance

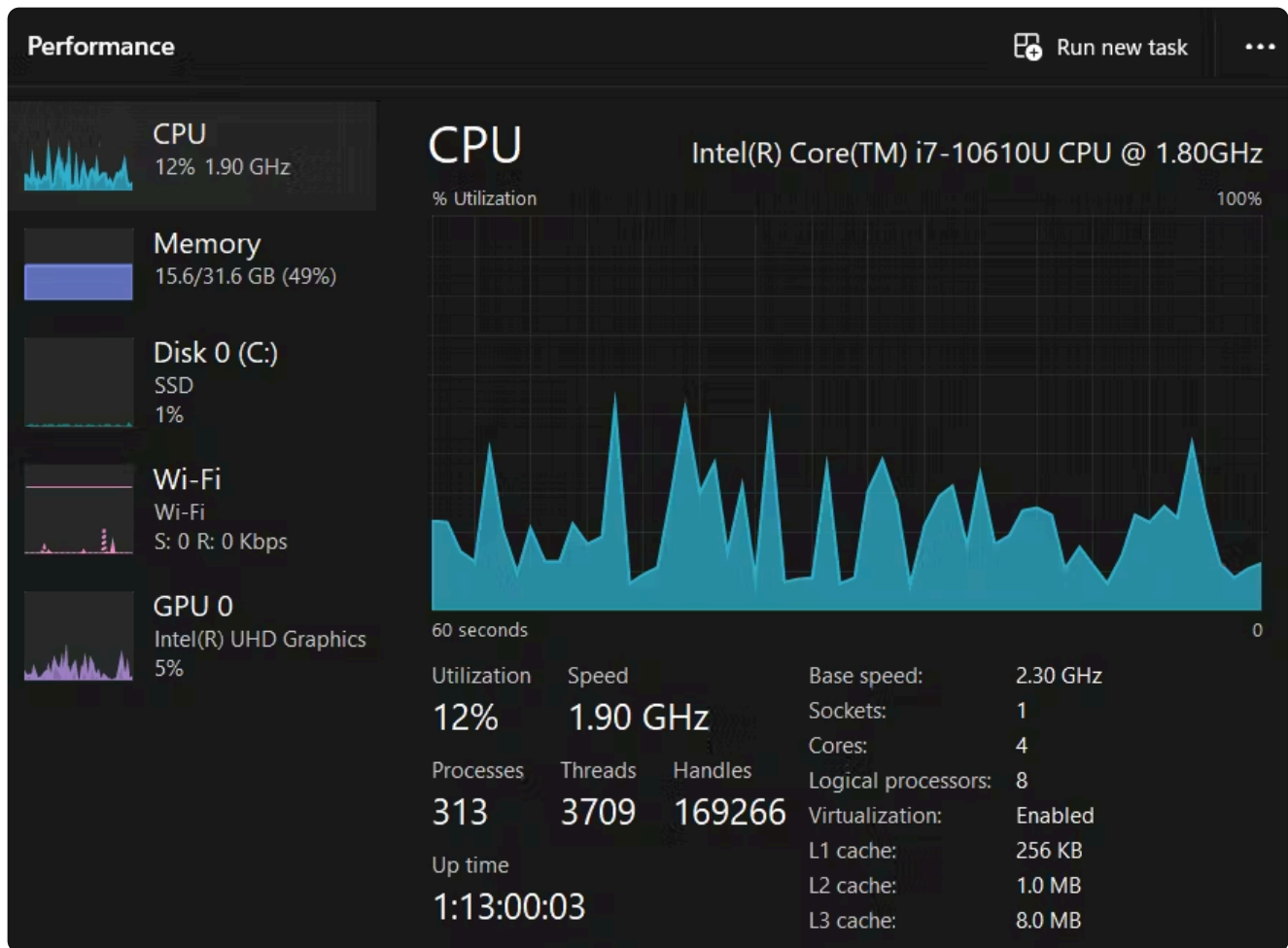
Before:



During:

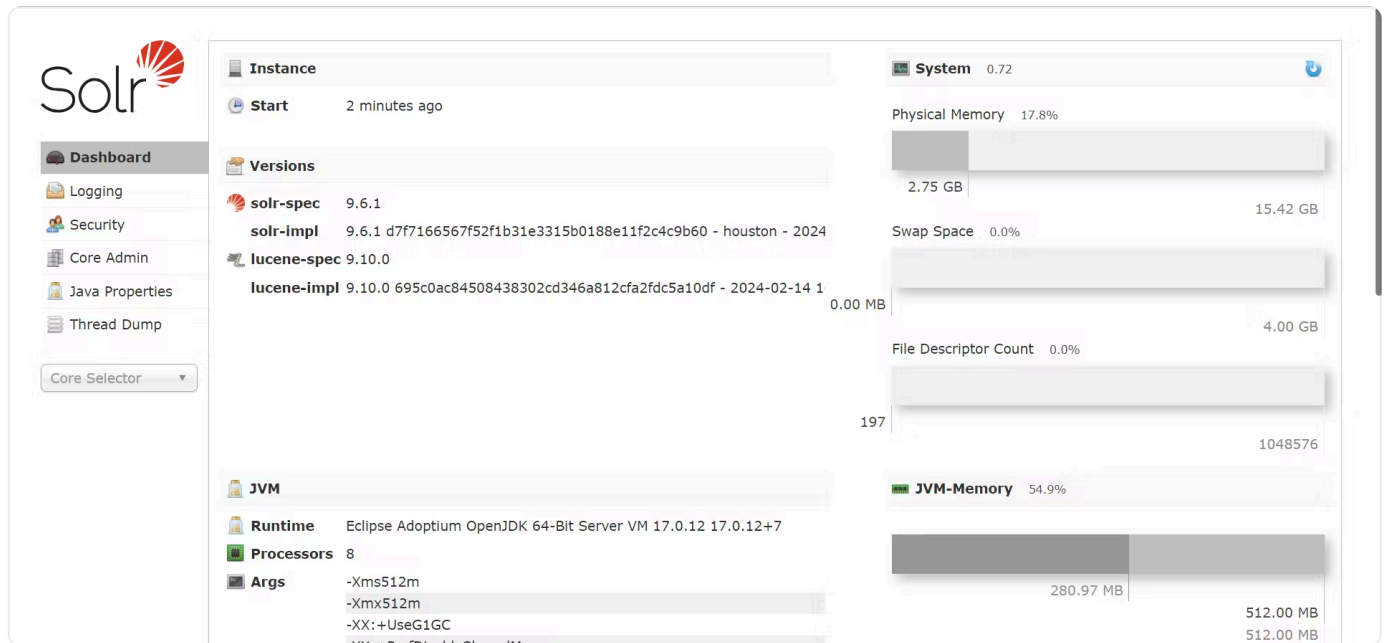


After:

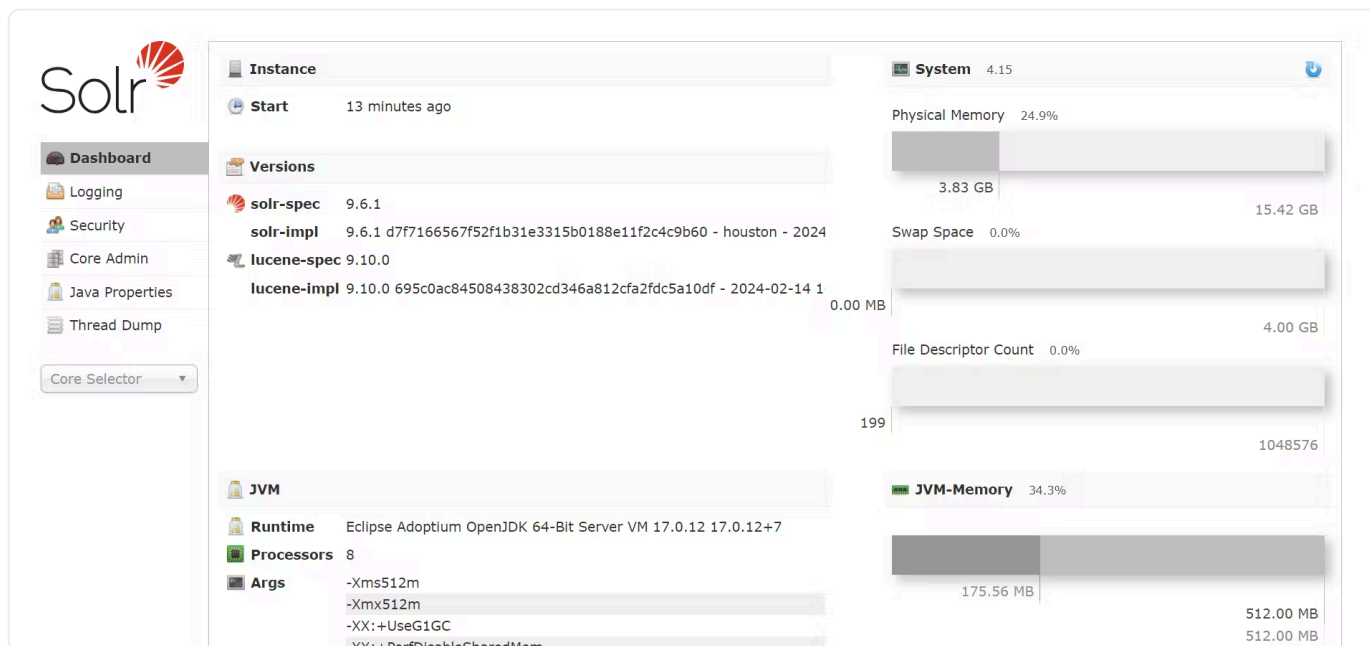


SOLR

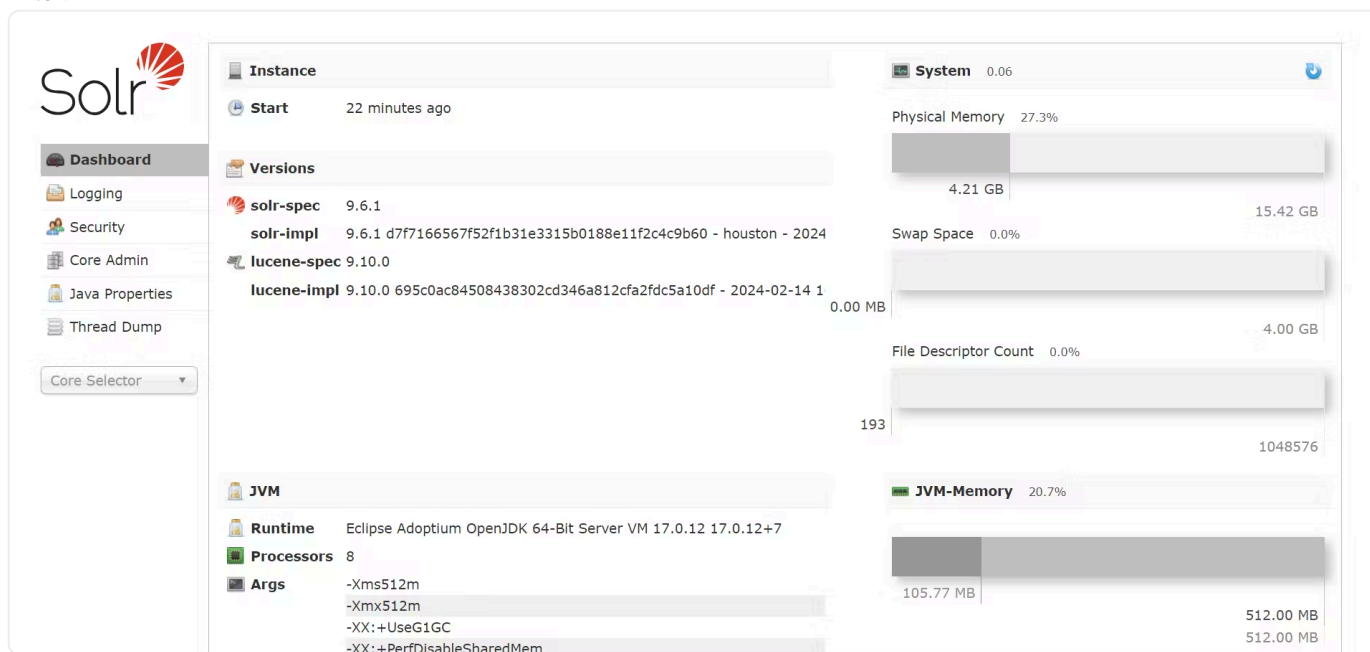
Before:



During:



After:



Conclusion:

- Error rate is 0.01%;
- CPU consumption is 95-100% during the test;
- Memory consumption <60%.

The benchmarking test showed errors during test run. Number of VUsers should be decreased. CPU load should be taken into account.

From 1804838 samples error rate is 0.01 %.
180 requests were failed

