

NetBeans: the Journey to Apache

The screenshot shows the NetBeans IDE interface with a Java project named 'geoGopher'. The 'Profile' window is open, displaying performance metrics for the 'Project classes' profile. The 'Methods' tab is selected, showing a list of methods and their execution times.

Name	Total Time	Total Time (CPU)	Hits
/127.0.0.1:47916	18.5 ms (100%)	18.5 ms (100%)	1
/192.168.1.207:38242	18.5 ms (100%)	18.5 ms (100%)	1
/192.168.1.207:38254	16.0 ms (100%)	16.0 ms (100%)	1
/192.168.1.207:38246	13.8 ms (100%)	13.8 ms (100%)	1
java.lang.Thread.run()	13.8 ms (100%)	13.8 ms (100%)	1
org.lyonlabs.geogopher.ConnectionThread.run()	13.8 ms (100%)	13.8 ms (100%)	1
org.apache.logging.log4j.spi.AbstractLogger.debug(String)	6.79 ms (49%)	6.79 ms (49%)	2
org.lyonlabs.Lyonlabs.hexDump(byte[], int, int)	3.38 ms (24.4%)	3.38 ms (24.4%)	2
org.apache.logging.log4j.spi.AbstractLogger.info(String)	1.43 ms (10.3%)	1.43 ms (10.3%)	3
org.lyonlabs.geogopher.ConnectionThread.sendResource(String)	1.12 ms (8.1%)	1.12 ms (8.1%)	1
java.net.SocketInputStream.read(byte[])	0.612 ms (4.4%)	0.612 ms (4.4%)	1
org.lyonlabs.geogopher.ConnectionThread.closeResource()	0.508 ms (3.7%)	0.508 ms (3.7%)	1

Name	Self Time (CPU)	Total Time (CPU)	Hits
org.apache.logging.log4j.LogManager.getLogger(String)	523 ms (36.9%)	523 ms (10.1%)	2
org.apache.logging.log4j.spi.AbstractLogger.debug(String)	230 ms (16.3%)	230 ms (4.5%)	74
org.lyonlabs.Lyonlabs.hexDump(byte[], int, int)	165 ms (11.7%)	165 ms (3.2%)	43
org.lyonlabs.d64.D64Utility.getDirectory(java.io.File, org.lyonlabs.d64.image.IImage)	126 ms (8.9%)	126 ms (2.4%)	8
org.apache.logging.log4j.spi.AbstractLogger.info(String)	108 ms (7.6%)	108 ms (2.1%)	110
java.awt.EventQueue.invokeLater(Runnable)	99.2 ms (7%)	99.2 ms (1.9%)	1

The 'Output' window at the bottom shows the following log entries:

```
2018-03-19 18:49:55.792 [127.0.0.1:47920] DEBUG ConnectionThread.run:53 0020: 67 65 6F 73 2F 67 65 6F 53 70 65 63 69 66 69 63 | geos/geo Specific
2018-03-19 18:49:55.793 [127.0.0.1:47920] DEBUG ConnectionThread.run:53 0030: 0D 0A
2018-03-19 18:49:55.793 [127.0.0.1:47920] INFO ConnectionThread.run:86 selector evaluates to:
2018-03-19 18:49:55.795 [127.0.0.1:47920] DEBUG ConnectionThread.run:89 0000: 2F 64 6F 77 6E 6C 6F 61 64 2F 63 36 34 2F 6F 70 | /download/c64/op
2018-03-19 18:49:55.795 [127.0.0.1:47920] DEBUG ConnectionThread.run:89 0010: 65 72 61 74 69 6E 67 2D 73 79 73 74 65 6D 73 2F | erating-systems/
2018-03-19 18:49:55.795 [127.0.0.1:47920] DEBUG ConnectionThread.run:89 0020: 67 65 6F 73 2F 67 65 6F 53 70 65 63 69 66 69 63 | geos/geo Specific
2018-03-19 18:49:55.796 [127.0.0.1:47920] INFO ConnectionThread.run:91 /127.0.0.1 sends selector "/download/c64/operating-systems/geos/geoSpecific"
```



What is NetBeans?

- ✓ an IDE: mostly Java, also HTML5, PHP, Python, C...
- ✓ support for desktop apps, Java EE, web...
- ✓ apps can be built with NetBeans Platform
- ✓ powerful debugger and profiler
- ✓ complete out-of-box, no extra configuration
- ✓ has always been at the cutting edge of Java
- ✓ now an Apache Incubator project!



History of NetBeans

- ✓ 1996: student project "Xelfi" in Prague, became product
- ✓ 1999: bought by Sun Microsystems
- ✓ 2000: open-sourced by Sun
- ✓ 2010: Sun acquired by Oracle
- ✓ September 2016: Oracle donates NetBeans to Apache



The Apache Transition

- ✓ infrastructure set up (web site, mailing lists, git)
- ✓ Oracle legal begins vetting the code
- ✓ August 2017: first donation transferred, committed to Apache git repo (45,000 files, 4 million lines of code)
- ✓ work begins on adjusting license headers: 30,000 files revised using a program written for the purpose
- ✓ November 2017: platform released as an alpha
- ✓ February 2018: NetBeans 9.0 beta released



Next Steps for NetBeans

- ✓ NetCAT program established, test specs reviewed
- ✓ full testing begins this week
- ✓ expected release May 2018
- ✓ 9.0 will be Java SE only
(Java EE code donation will be in next release)
- ✓ will support Java 8 and Java 10



How Can I Contribute?

- ✓ <https://netbeans.apache.org/participate/>
- ✓ we need: coders, testers, documentation
- ✓ need to raise awareness about NetBeans now that we're nearing our first release
- ✓ second code donation Real Soon Now™
(will need help with license changes)



Resources

- ✓ Apache NetBeans web site:

<https://netbeans.apache.org/>

- ✓ NetCAT program:

<https://cwiki.apache.org/confluence/display/NETBEANS/NetCAT+9.0>

- ✓ NetBeans source code:

<https://github.com/apache/incubator-netbeans>

- ✓ New and Noteworthy (mostly Java 9, PHP):

<https://cwiki.apache.org/confluence/display/NETBEANS/Apache+NetBeans+9.0+New+and+Noteworthy>



QUESTIONS

