Testovanie scenára true pre debug taktiku s logmi

OS: windows 10 version 10.0.16299 amd64 proccesors 4

Vývojové prostredie: Eclipse

Nástroj: Yourkit

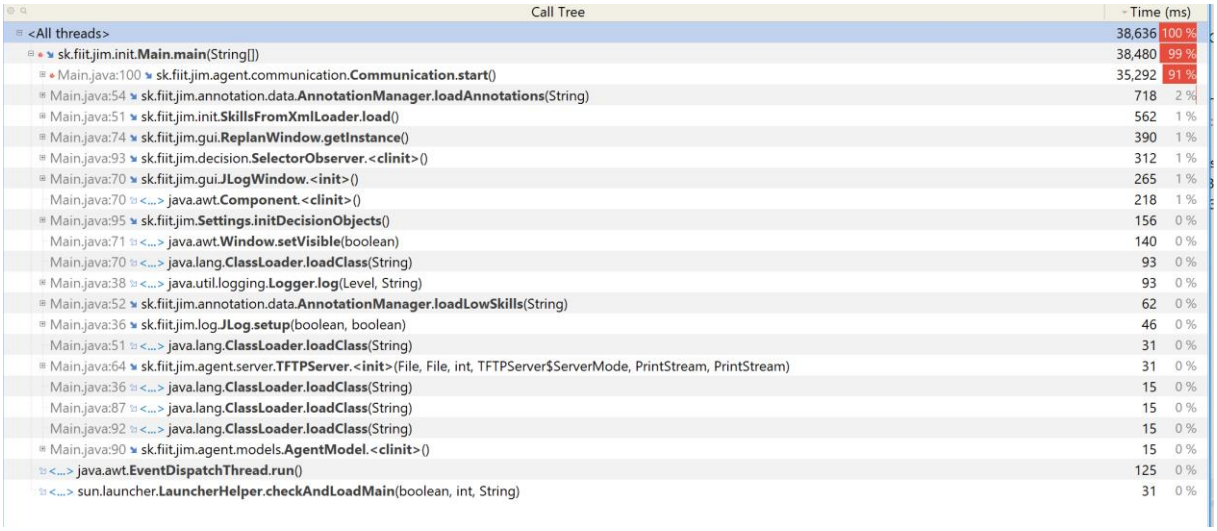
Stav pred spustením taktiky:

1. **Heap memory:**
    - 124mb allocated
    - 15-99 mb used
    - Limit 1.8 GB
2. **Non – Heap memory:**
    - 39mb allocated
    - 38mb used
    - Limit unknown
3. **Garbage collection:**
    - 1/s
    - Collections: 156
    - Time: 0s
4. **Classes:**
    - Currently loaded: 3503
5. **CPU usage telemetry**
    - CPU time (user + kernel): 14% - 47%
    - CPU time (kernel): 0%- 3%
    - Time spent in GC: 0%
6. **Threads**
    - 13 threads
    - 9 daemon threads
    - 14 peak
    - Total created 18

Stav počas spustenej taktiky:

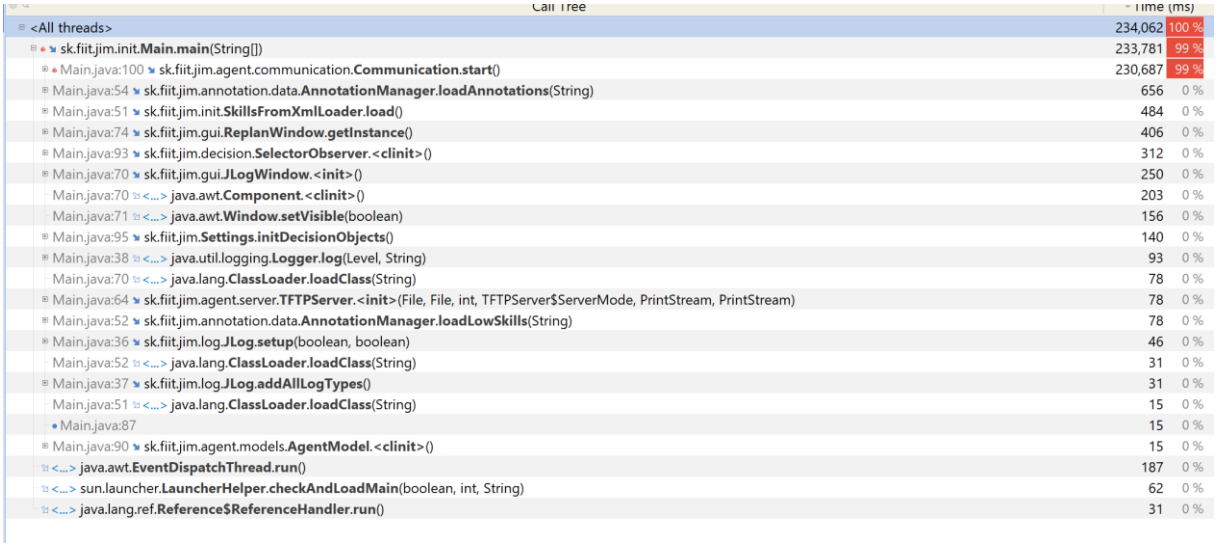
1. **Heap memory:**
    a. 61-73mb allocated
    b. 36 mb used
    c. Limit 1.8 GB
2. **Non – Heap memory:**
    a. 41mb allocated
    b. 40mb used
    c. Limit unknown
3. **Garbage collection:**
    a. 1/s
    b. Collections: 642
    c. Time: 1s
4. **Classes:**
    a. Currently loaded: 3554
5. **CPU usage telemetry**
    a. CPU time (user + kernel): 14% - 47%
    b. CPU time (kernel): 0%- 3%
    c. Time spent in GC: 0%
6. **Threads**
    a. 13 threads
    b. 9 daemon threads
    c. 14 peak
    d. Total created 18

Call Tree pred spustením vs. Call Tree po spustení:



Call Tree	Time (ms)	
<All threads>	38,636	100 %
sk.fiit.jim.init.**Main.main**(String[])	38,480	99 %
Main.java:100 sk.fiit.jim.agent.communication.**Communication.start**()	35,292	91 %
Main.java:54 sk.fiit.jim.annotation.data.**AnnotationManager.loadAnnotations**(String)	718	2 %
Main.java:51 sk.fiit.jim.init.**SkillsFromXmlLoader.load**()	562	1 %
Main.java:74 sk.fiit.jim.gui.**ReplanWindow.getInstance**()	390	1 %
Main.java:93 sk.fiit.jim.decision.**SelectorObserver.<clinit>**()	312	1 %
Main.java:70 sk.fiit.jim.gui.**JLogWindow.<init>**()	265	1 %
Main.java:70 <...> java.awt.**Component.<clinit>**()	218	1 %
Main.java:95 sk.fiit.jim.**Settings.initDecisionObjects**()	156	0 %
Main.java:71 <...> java.awt.**Window.setVisible**(boolean)	140	0 %
Main.java:70 <...> java.lang.**ClassLoader.loadClass**(String)	93	0 %
Main.java:38 <...> java.util.logging.**Logger.log**(Level, String)	93	0 %
Main.java:52 sk.fiit.jim.annotation.data.**AnnotationManager.loadLowSkills**(String)	62	0 %
Main.java:36 sk.fiit.jim.log.**JLog.setup**(boolean, boolean)	46	0 %
Main.java:51 <...> java.lang.**ClassLoader.loadClass**(String)	31	0 %
Main.java:64 sk.fiit.jim.agent.server.**TFTPServer.<init>**(File, File, int, TFTPServer$ServerMode, PrintStream, PrintStream)	31	0 %
Main.java:36 <...> java.lang.**ClassLoader.loadClass**(String)	15	0 %
Main.java:87 <...> java.lang.**ClassLoader.loadClass**(String)	15	0 %
Main.java:92 <...> java.lang.**ClassLoader.loadClass**(String)	15	0 %
Main.java:90 sk.fiit.jim.agent.models.**AgentModel.<clinit>**()	15	0 %
<...> java.awt.**EventDispatchThread.run**()	125	0 %
<...> sun.launcher.**LauncherHelper.checkAndLoadMain**(boolean, int, String)	31	0 %

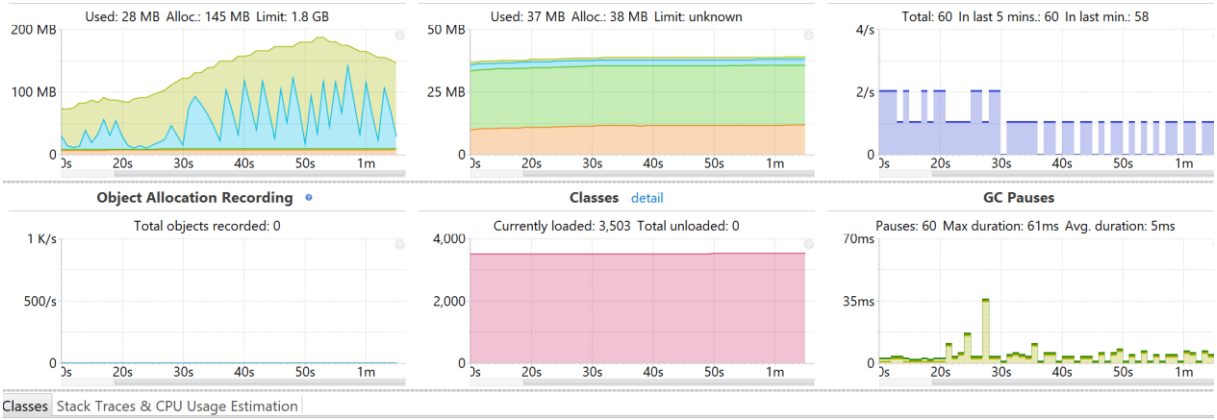
Obrázok 1 Call tree pred spustením



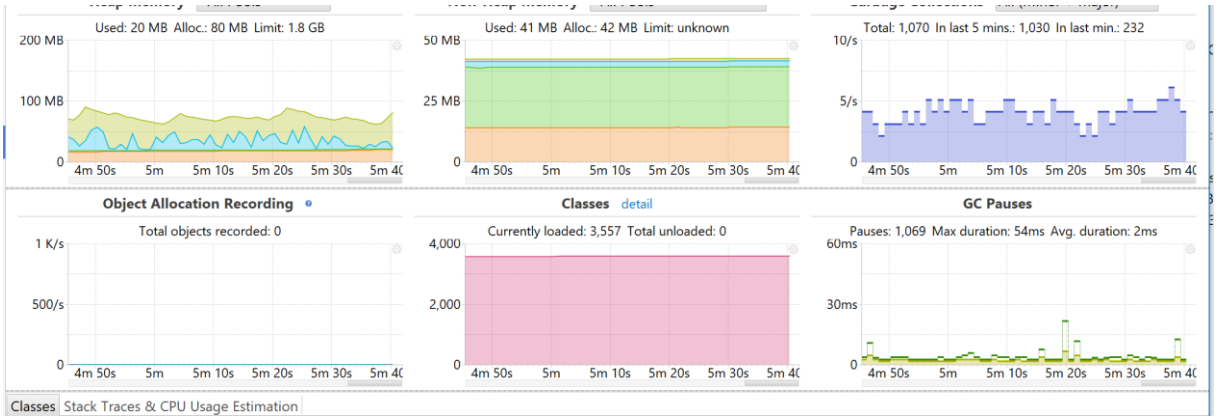
Call Tree	Time (ms)	
<All threads>	234,062	100 %
sk.fiit.jim.init.**Main.main**(String[])	233,781	99 %
Main.java:100 sk.fiit.jim.agent.communication.**Communication.start**()	230,687	99 %
Main.java:54 sk.fiit.jim.annotation.data.**AnnotationManager.loadAnnotations**(String)	656	0 %
Main.java:51 sk.fiit.jim.init.**SkillsFromXmlLoader.load**()	484	0 %
Main.java:74 sk.fiit.jim.gui.**ReplanWindow.getInstance**()	406	0 %
Main.java:93 sk.fiit.jim.decision.**SelectorObserver.<clinit>**()	312	0 %
Main.java:70 sk.fiit.jim.gui.**JLogWindow.<init>**()	250	0 %
Main.java:70 <...> java.awt.**Component.<clinit>**()	203	0 %
Main.java:71 <...> java.awt.**Window.setVisible**(boolean)	156	0 %
Main.java:95 sk.fiit.jim.**Settings.initDecisionObjects**()	140	0 %
Main.java:38 <...> java.util.logging.**Logger.log**(Level, String)	93	0 %
Main.java:70 <...> java.lang.**ClassLoader.loadClass**(String)	78	0 %
Main.java:64 sk.fiit.jim.agent.server.**TFTPServer.<init>**(File, File, int, TFTPServer$ServerMode, PrintStream, PrintStream)	78	0 %
Main.java:52 sk.fiit.jim.annotation.data.**AnnotationManager.loadLowSkills**(String)	78	0 %
Main.java:36 sk.fiit.jim.log.**JLog.setup**(boolean, boolean)	46	0 %
Main.java:52 <...> java.lang.**ClassLoader.loadClass**(String)	31	0 %
Main.java:37 sk.fiit.jim.log.**JLog.addAllLogTypes**()	31	0 %
Main.java:51 <...> java.lang.**ClassLoader.loadClass**(String)	15	0 %
Main.java:87	15	0 %
Main.java:90 sk.fiit.jim.agent.models.**AgentModel.<clinit>**()	15	0 %
<...> java.awt.**EventDispatchThread.run**()	187	0 %
<...> sun.launcher.**LauncherHelper.checkAndLoadMain**(boolean, int, String)	62	0 %
<...> java.lang.ref.**Reference$ReferenceHandler.run**()	31	0 %

Obrázok 2 Call tree po spustení

Memory pred vs Memory Po spustení:



Obrázok 3 Memory pred spustením



Obrázok 4 Memory po spustení

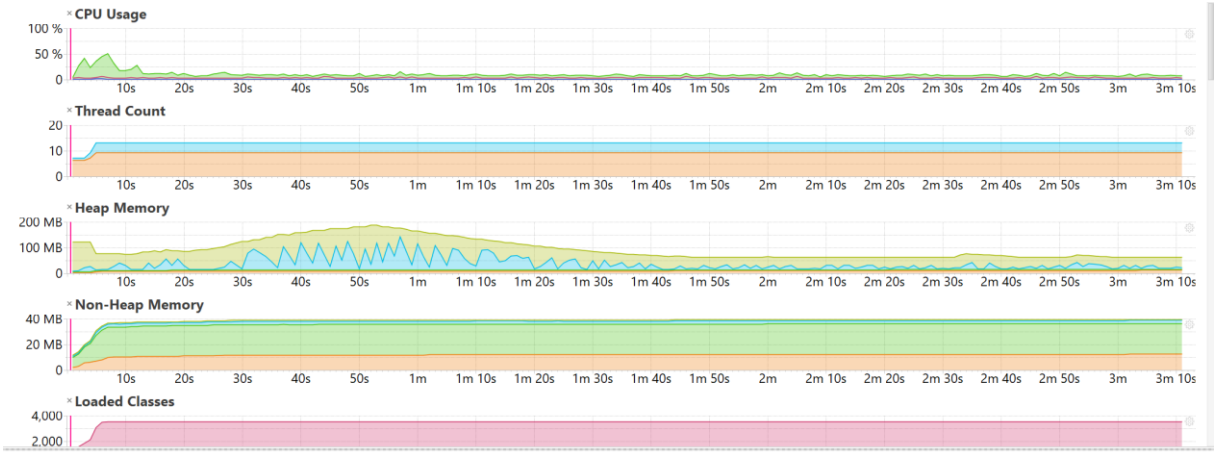
Method	Time (ms)	Own Time (ms)
sk.fiit.jim.init.**Main.main**(String[]) Main.java	48,632 99 %	0
sk.fiit.jim.agent.communication.**Communication.start**() Communication.java	45,444 93 %	< 0.1
sk.fiit.jim.agent.communication.**Communication.mainLoop**() Communication.java	45,243 93 %	0
sk.fiit.jim.agent.parsing.**Parser.parse**(String) Parser.java	34,750 71 %	0
sk.fiit.jim.agent.parsing.**Parser.notifyObservers**() Parser.java	34,578 71 %	0
sk.fiit.jim.agent.models.**AgentModel.processNewServerMessage**(ParsedData) AgentModel.java	30,312 62 %	0
sk.fiit.jim.agent.models.**AgentModel.updateRotations**(ParsedData) AgentModel.java	24,687 51 %	0
sk.fiit.jim.agent.models.**AgentRotationCalculator.getFlagsOfSideWithMoreFlagsSeen**(Map) AgentRotationCalculator.java	24,687 51 %	0
sk.fiit.jim.agent.models.**AgentRotationCalculator.updateRotations**(ParsedData) AgentRotationCalculator.java	24,687 51 %	0
java.io.**BufferedWriter.close**()	20,984 43 %	20,984
sk.fiit.jim.log.**JimLocalFileCreator.writeLogFile**(String) JimLocalFileCreator.java	18,968 39 %	0
sk.fiit.jim.agent.communication.**Communication.receive**() Communication.java	9,915 20 %	0
java.io.**DataInputStream.readInt**()	9,899 20 %	9,899
sk.fiit.jim.log.**JimLocalFileCreator.writeLogFileGameTime**(String) JimLocalFileCreator.java	8,562 18 %	0
java.util.logging.**Logger.log**(Level, String)	4,828 10 %	2,468
sk.fiit.jim.agent.models.**AgentModel.updateBodyPartsPositions2**() AgentModel.java	4,593 9 %	15
sk.fiit.jim.agent.models.**WorldModel.processNewServerMessage**(ParsedData) WorldModel.java	3,984 8 %	31
sk.fiit.jim.agent.communication.testframework.**Message$WorldModel.changed**(WorldModel) Message.java	3,890 8 %	171
sk.fiit.jim.log.**JimLocalCsvFileCreator.writeCsvLog**(String[]) JimLocalCsvFileCreator.java	3,546 7 %	0
java.io.**FileWriter.<init>**(String, boolean)	2,375 5 %	2,375
sk.fiit.jim.log.**JimHtmlFormatter.format**(LogRecord) JimHtmlFormatter.java	2,343 5 %	46
java.util.logging.**LogRecord.getSourceClassName**()	2,000 4 %	2,000
sk.fiit.jim.log.**JimLocalCsvFileCreator.<init>**(String) JimLocalCsvFileCreator.java	1,640 3 %	0
org.apache.commons.net.util.**Base64.encodeBase64String**(byte[]) Base64.java	1,500 3 %	1,500
java.io.**ObjectOutputStream.writeObject**(Object)	1,234 3 %	2,343
sk.fiit.jim.log.**JimLocalFileCreator.<init>**() JimLocalFileCreator.java	1,187 2 %	0
sk.fiit.robocup.library.geometry.**Vector3D.calculateSpherical**() Vector3D.java	953 2 %	0
sk.fiit.robocup.library.geometry.**Vector3D.cartesian**(double, double, double) Vector3D.java	953 2 %	0
java.lang.**Math.asin**(double)	765 2 %	765
sk.fiit.jim.agent.communication.**Communication.transmit**(String) Communication.java	732 2 %	0
java.security.**MessageDigest.digest**(byte[])	718 1 %	718
sk.fiit.jim.annotation.data.**AnnotationManager.loadAnnotations**(String) AnnotationManager.java	718 1 %	0

Obrázok 5 MethodListCPUPredSpustením

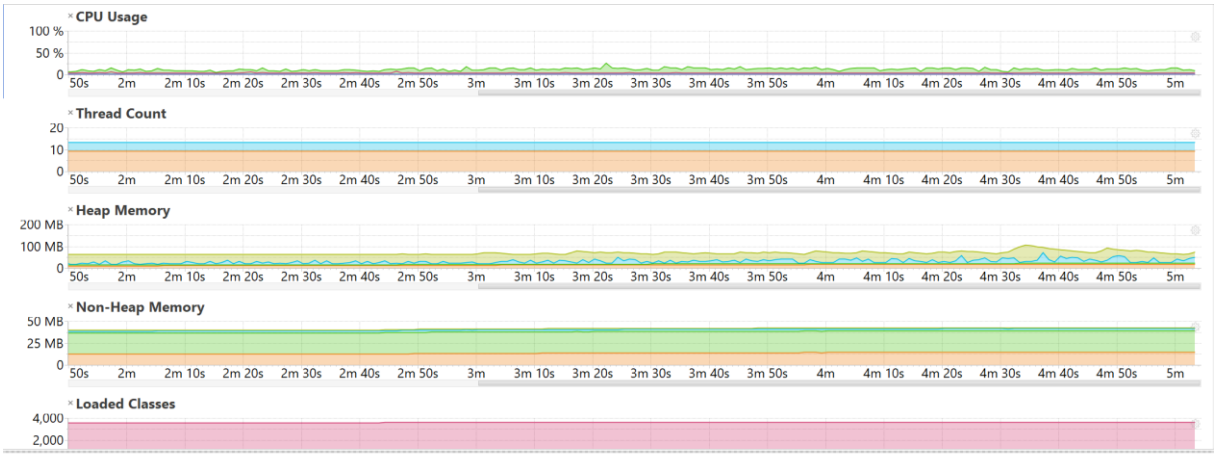
Method	Time (ms)	Own Time (ms)
sk.fiit.jim.init.**Main.main**(String[]) Main.java	248,524 99 %	15
sk.fiit.jim.agent.communication.**Communication.start**() Communication.java	245,431 99 %	0
sk.fiit.jim.agent.communication.**Communication.mainLoop**() Communication.java	244,196 98 %	46
sk.fiit.jim.agent.communication.**Communication.receive**() Communication.java	120,732 49 %	0
java.io.**DataInputStream.readInt**()	120,644 48 %	120,644
sk.fiit.jim.agent.parsing.**Parser.parse**(String) Parser.java	120,375 48 %	0
sk.fiit.jim.agent.parsing.**Parser.notifyObservers**() Parser.java	119,609 48 %	62
sk.fiit.jim.agent.models.**AgentModel.processNewServerMessage**(ParsedData) AgentModel.java	76,062 31 %	0
sk.fiit.jim.agent.models.**AgentModel.updateRotations**(ParsedData) AgentModel.java	48,781 20 %	0
sk.fiit.jim.agent.models.**AgentRotationCalculator.updateRotations**(ParsedData) AgentRotationCalculator.java	48,781 20 %	0
sk.fiit.jim.agent.models.**AgentRotationCalculator.getFlagsOfSideWithMoreFlagsSeen**(Map) AgentRotationCalculator.java	48,734 20 %	0
sk.fiit.jim.agent.models.**WorldModel.processNewServerMessage**(ParsedData) WorldModel.java	41,718 17 %	312
sk.fiit.jim.agent.communication.testframework.**Message$WorldModel.changed**(WorldModel) Message.java	41,171 17 %	1,859
java.io.**BufferedWriter.close**()	40,984 16 %	40,984
sk.fiit.jim.log.**JimLocalFileCreator.writeLogFile**(String) JimLocalFileCreator.java	35,984 14 %	0
sk.fiit.jim.agent.models.**AgentModel.updateBodyPartsPositions2**() AgentModel.java	22,640 9 %	15
java.util.logging.**Logger.log**(Level, String)	21,625 9 %	9,765
org.apache.commons.net.util.**Base64.encodeBase64String**(byte[]) Base64.java	17,656 7 %	17,656
sk.fiit.jim.log.**JimLocalFileCreator.writeLogFileGameTime**(String) JimLocalFileCreator.java	15,718 6 %	0
sk.fiit.jim.log.**JimHtmlFormatter.format**(LogRecord) JimHtmlFormatter.java	11,781 5 %	203
java.security.**MessageDigest.digest**(byte[])	10,562 4 %	10,562
java.util.logging.**LogRecord.getSourceClassName**()	10,250 4 %	10,250
java.io.**ObjectOutputStream.writeObject**(Object)	10,062 4 %	19,781
sk.fiit.jim.log.**JimLocalCsvFileCreator.writeCsvLog**(String[]) JimLocalCsvFileCreator.java	7,468 3 %	0
sk.fiit.robocup.library.geometry.**Vector3D.calculateSpherical**() Vector3D.java	5,703 2 %	0
sk.fiit.robocup.library.geometry.**Vector3D.cartesian**(double, double, double) Vector3D.java	5,703 2 %	0
java.io.**FileWriter.<init>**(String, boolean)	4,140 2 %	4,140
java.lang.**Math.asin**(double)	4,093 2 %	4,093
sk.fiit.jim.log.**JimLocalCsvFileCreator.<init>**(String) JimLocalCsvFileCreator.java	3,609 1 %	0
sk.fiit.jim.agent.communication.**Communication.transmit**(String) Communication.java	3,558 1 %	< 0.1
java.io.**DataOutputStream.writeInt**(int)	3,272 1 %	3,272
sk.fiit.jim.agent.models.**BodyPart.computeRelativePositionsToTorso**(Map, Map) BodyPart.java	2,875 1 %	0

Obrázok 6 MethodListCpuPoSpustení

Performance Chart pred spustením vs: Performance Chart po spustení:

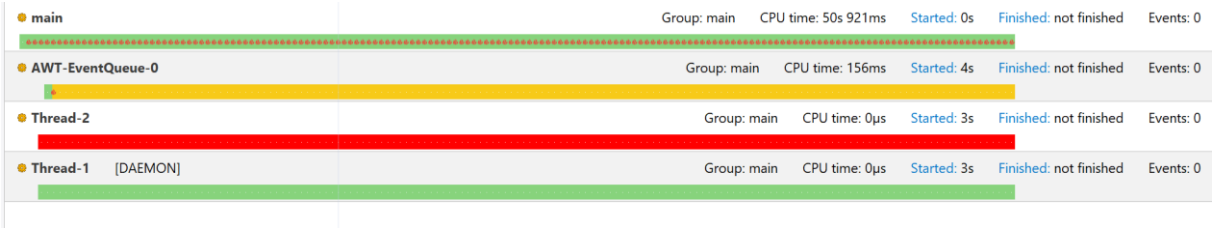


Obrázok 7 Performance Chart Pred spustením

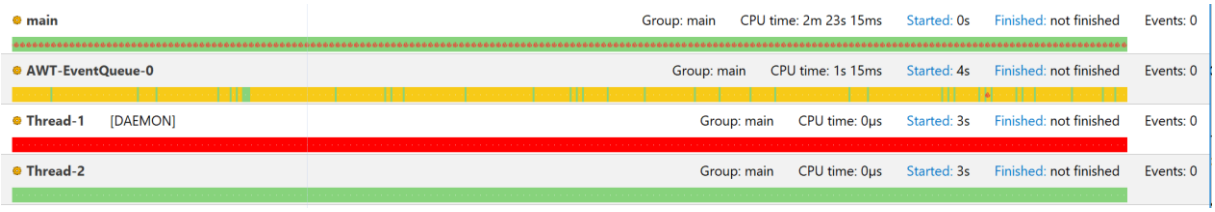


Obrázok 8 Performance Chart Po spustení

Thready pred spustením vs Thready po spustení:



Obrázok 9 Thread yPred spustením



Obrázok 10 Thready Po spustení