Dissertation Testing - Spring AMQP

SPRING AMQP - EpsilonGC - SingleThread

Spring AMQP Test 1

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	10000
GC used	EpsilonGC
MultiThreaded	NO
Completed	YES
CPU Producer	24960 adowling 20 0 15.0g 1.4g 15292 S 0.3 18.3 2:27.91 java 24960 adowling 20 0 15.0g 1.4g 15292 S 0.3 18.3 2:27.92 java 16122 adowling 20 0 14.3g 162464 13620 S 86.7 2.0 0:02.60 java 24960 adowling 20 0 15.0g 1.4g 15292 S 0.3 18.3 2:27.93 java 16122 adowling 20 0 14.3g 162464 13620 S 0.3 2.0 0:02.61 java 16122 adowling 20 0 14.5g 304396 14204 S 104.6 3.8 0:05.77 java 16122 adowling 20 0 14.5g 578192 14516 S 178.3 7.2 0:11.12 java 16122 adowling 20 0 14.5g 675864 14576 S 110.0 8.4 0:14.43 java 24960 adowling 20 0 15.0g 1.4g 15292 S 0.3 18.3 2:27.94 java
CPU Consumer	16868 adowling 20 0 14.5g 613940 14504 S 0.3 7.7 0:13.71 java 16868 adowling 20 0 14.5g 613944 14504 S 0.3 7.7 0:13.72 java 16868 adowling 20 0 14.5g 613944 14504 S 0.3 7.7 0:13.73 java 16868 adowling 20 0 14.5g 624800 14528 S 32.9 7.8 0:14.72 java 16868 adowling 20 0 14.5g 627620 14528 S 6.3 7.8 0:14.91 java

Spring AMQP Test 2

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	100000
GC used	EpsilonGC

MultiThreaded	NO
Completed	YES
CPU Producer	16290 adowling 20 0 14.3g 335884 14196 S 110.9 4.2 0:06.33 **java** 16290 adowling 20 0 14.5g 625784 14504 S 172.0 7.8 0:11.49 **java** 16290 adowling 20 0 14.5g 725520 14568 S 72.8 9.1 0:13.68 **java** 16290 adowling 20 0 14.5g 720912 14568 S 0.3 9.0 0:13.69 **java** 16290 adowling 20 0 14.5g 720912 14568 S 0.3 9.0 0:13.70 **java** 16290 adowling 20 0 14.5g 720912 14568 S 0.3 9.0 0:13.71 **java**
CPU Consumer	16868 adowling 20 0 14.5g 627752 14532 S 0.3 7.8 0:15.18 **java** 16868 adowling 20 0 14.5g 651428 14624 S 17.6 8.1 0:15.71 **java** 16868 adowling 20 0 14.5g 674452 14628 S 13.0 8.4 0:16.10 **java**

Spring AMQP Test 3

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	1000000
GC used	EpsilonGC
MultiThreaded	NO
Completed	YES
CPU Producer	16390 adowling 20 0 13.9g 20512 9544 S 1.7 0.3 0:00.05 **java** 16390 adowling 20 0 14.3g 162888 13608 S 75.7 2.0 0:02.33 **java** 16390 adowling 20 0 14.3g 473592 14380 S 169.4 5.9 0:07.43 **java** 16390 adowling 20 0 14.5g 831060 14556 S 151.5 10.4 0:11.99 **java** 16390 adowling 20 0 14.5g 1.1g 14576 S 89.0 14.1 0:14.67 **java** 16390 adowling 20 0 14.5g 1.0g 14576 S 0.3 13.7 0:14.68 **java**
CPU Consumer	16868 adowling 20 0 14.5g 674452 14628 S 0.3 8.4 0:16.20 **java** 16868 adowling 20 0 14.5g 674452 14628 S 0.3 8.4 0:16.21 **java** 16868 adowling 20 0 14.5g 896064 14628 S 34.2 11.2 0:17.24 **java** 16868 adowling 20 0 14.5g 1.1g 14644 S 55.7 14.7 0:18.91 **java**

Spring AMQP Test 4

Date	16/03/2020
Library	Spring AMQP

Message Volume	1000
Message Byte Size	10000
GC used	EpsilonGC
MultiThreaded	NO
Completed	YES
CPU Producer	16497 adowling 20 0 14.2g 113040 13280 S 42.7 1.4 0:01.29 **java** 16497 adowling 20 0 14.3g 178872 13572 S 40.5 2.2 0:02.51 **java** 16497 adowling 20 0 14.3g 213848 13960 S 23.6 2.7 0:03.22 **java** 16497 adowling 20 0 14.5g 519220 14540 S 183.1 6.5 0:08.73 **java** 16497 adowling 20 0 14.5g 669084 14568 S 100.3 8.4 0:11.74 **java** 16497 adowling 20 0 14.5g 685152 14624 S 39.9 8.6 0:12.94 **java** 16497 adowling 20 0 14.5g 705320 14656 S 40.9 8.8 0:14.17 **java** 16497 adowling 20 0 14.5g 726356 14656 S 26.6 9.1 0:14.97 **java** 16497 adowling 20 0 14.5g 761720 14664 S 39.5 9.5 0:16.16 **java** 16497 adowling 20 0 14.5g 754468 14664 S 4.0 9.4 0:16.28 **java**
CPU Consumer	16868 adowling 20 0 14.5g 1.1g 14644 S 0.3 14.7 0:19.02 **java** 16868 adowling 20 0 14.5g 1.1g 14652 S 39.2 14.9 0:20.20 **java** 16868 adowling 20 0 14.5g 1.1g 14652 S 35.0 15.0 0:21.25 **java** 16868 adowling 20 0 14.5g 1.2g 14652 S 35.2 15.2 0:22.31 **java** 16868 adowling 20 0 14.5g 1.2g 14660 S 21.6 15.4 0:22.96 **java** 16868 adowling 20 0 14.5g 1.2g 14660 S 23.6 15.5 0:23.67 **java** 16868 adowling 20 0 14.5g 1.2g 14660 S 0.3 15.5 0:23.68 **java**

Spring AMQP Test 5

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	100000
GC used	EpsilonGC
MultiThreaded	NO
Completed	YES
CPU Producer	16580 adowling 20 0 14.3g 314716 14164 S 87.7 3.9 0:04.88 **java** 16580 adowling 20 0 14.5g 636936 14464 S 188.4 8.0 0:10.57 **java** 16580 adowling 20 0 14.5g 752288 14592 S 69.0 9.4 0:12.64 **java** 16580 adowling 20 0 14.5g 872128 14616 S 55.1 10.9 0:14.30 **java** 16580 adowling 20 0 14.5g 983912 14628 S 43.9 12.3 0:15.62 **java** 16580 adowling 20 0 14.5g 1.1g 14628 S 30.9 13.7 0:16.55 **java** 16580 adowling 20 0 14.5g 1.2g 14640 S 51.8 15.1 0:18.11 **java** 16580 adowling 20 0 14.5g 1.2g 14644 S 12.3 15.2 0:18.48 **java**

CPU Consumer	16868 adowling 20 0 14.5g 1.2g 14660 S 18.8 15.7 0:23.85 **java** 16868 adowling 20 0 14.5g 1.3g 14660 S 32.9 16.8 0:24.84 **java** 16868 adowling 20 0 14.5g 1.4g 14660 S 31.6 17.9 0:25.79 **java** 16868 adowling 20 0 14.5g 1.5g 14660 S 27.6 19.1 0:26.62 **java** 16868 adowling 20 0 14.5g 1.6g 14660 S 32.7 20.4 0:27.60 **java** 16868 adowling 20 0 14.5g 1.6g 14660 S 14.3 21.1 0:28.03 **java** 16868 adowling 20 0 14.5g 1.6g 14660 S 0.7 21.0 0:28.05 **java**

Spring AMQP Test 6

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	1000000
GC used	EpsilonGC
MultiThreaded	NO
Completed	YES
CPU Producer	16686 adowling 20 0 14.3g 181112 13592 S 88.4 2.3 0:02.66 **java** 16686 adowling 20 0 14.3g 172604 13592 S 0.3 2.2 0:02.67 **java** 16686 adowling 20 0 14.3g 427872 14328 S 150.0 5.3 0:07.20 **java** 16686 adowling 20 0 14.5g 831384 14548 S 153.0 10.4 0:11.79 **java** 16686 adowling 20 0 14.5g 1.3g 14600 S 59.1 17.5 0:13.57 **java** 16686 adowling 20 0 14.5g 1.8g 14632 S 71.8 23.8 0:15.73 **java** 16686 adowling 20 0 14.5g 2.3g 14636 S 66.1 30.0 0:17.72 **java** 16686 adowling 20 0 14.5g 2.7g 14648 S 69.8 35.7 0:19.82 **java** 16686 adowling 20 0 14.5g 3.2g 14648 S 71.1 41.3 0:21.96 **java** 16686 adowling 20 0 14.5g 3.6g 14648 S 59.9 47.0 0:23.77 **java** 16686 adowling 20 0 14.5g 4.0g 14648 S 60.8 52.6 0:25.60 **java** 16686 adowling 20 0 14.5g 4.4g 14648 S 58.1 58.1 0:27.35 **java** 16686 adowling 20 0 14.5g 4.9g 14656 S 64.8 63.5 0:29.30 **java** 16686 adowling 20 0 14.5g 4.9g 14656 S 23.9 63.7 0:30.02 **java** 16686 adowling 20 0 14.5g 4.9g 14656 S 0.7 63.7 0:30.04 **java**
CPU Consumer	16868 adowling 20 0 14.5g 1.6g 14660 S 0.3 21.0 0:28.12 **java** 16868 adowling 20 0 14.5g 1.6g 14660 S 0.3 21.0 0:28.13 **java** 16868 adowling 20 0 14.5g 1.6g 14660 S 0.3 21.0 0:28.14 **java** 16868 adowling 20 0 14.5g 2.0g 14660 S 61.8 26.5 0:30.00 **java** 16868 adowling 20 0 14.5g 2.6g 14660 S 86.4 33.7 0:32.60 **java** 16868 adowling 20 0 14.5g 3.2g 14660 S 98.7 41.4 0:35.57 **java** 16868 adowling 20 0 14.5g 3.7g 14660 S 86.0 48.4 0:38.16 **java** 16868 adowling 20 0 14.5g 4.2g 14660 S 63.1 54.9 0:40.06 **java** 16868 adowling 20 0 14.5g 4.7g 14660 S 59.5 61.1 0:41.85 **java** 16868 adowling 20 0 14.5g 5.2g 14660 S 63.3 67.6 0:43.75 **java** 16868 adowling 20 0 14.5g 5.6g 14660 S 65.4 73.8 0:45.72 **java**

	16868 adowling 20 0 14.5g 6.1g 14660 S 58.1 80.1 0:47.47 **java** 16868 adowling 20 0 14.5g 6.4g 14676 S 39.5 83.7 0:48.66 **java**

SPRING AMQP - EpsilonGC - MultiThread

Spring AMQP Test 1

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	10000
GC used	EpsilonGC
MultiThreaded	YES
Completed	YES
CPU Producer	16837 adowling 20 0 14.3g 172040 13700 S 82.7 2.1 0:02.49 **java** 16837 adowling 20 0 14.3g 351188 14252 S 125.5 4.4 0:06.28 **java** 16837 adowling 20 0 14.5g 635080 14528 S 169.4 7.9 0:11.38 **java** 16837 adowling 20 0 14.5g 665680 14564 S 50.3 8.3 0:12.89 **java** 16837 adowling 20 0 14.5g 661376 14564 S 0.7 8.3 0:12.91 **java**
CPU Consumer	16934 adowling 20 0 14.5g 627884 14504 S 0.7 7.8 0:11.37 **java** 16934 adowling 20 0 14.5g 622904 14504 S 0.3 7.8 0:11.38 **java** 16934 adowling 20 0 14.5g 622904 14504 S 0.3 7.8 0:11.39 **java** 16934 adowling 20 0 14.5g 636888 14528 S 37.2 8.0 0:12.51 **java** 16934 adowling 20 0 14.5g 636888 14528 S 0.3 8.0 0:12.52 **java**

Spring AMQP Test 2

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	100000
GC used	EpsilonGC
MultiThreaded	YES

Completed	YES
CPU Producer	16937 adowling 20 0 14.3g 290768 14168 S 77.4 3.6 0:04.63 **java** 16937 adowling 20 0 14.5g 621352 14488 S 189.4 7.8 0:10.33 **java** 16937 adowling 20 0 14.5g 727164 14560 S 95.0 9.1 0:13.19 **java** 16937 adowling 20 0 14.5g 718064 14560 S 5.3 9.0 0:13.35 **java** 16937 adowling 20 0 14.5g 718064 14560 S 0.3 9.0 0:13.36 **java**
CPU Consumer	16934 adowling 20 0 14.5g 636916 14528 S 0.3 8.0 0:12.65 **java** 16934 adowling 20 0 14.5g 681780 14624 S 27.7 8.5 0:13.48 **java**

Spring AMQP Test 3

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	1000000
GC used	EpsilonGC
MultiThreaded	YES
Completed	YES
CPU Producer	17081 adowling 20 0 14.3g 163356 13632 S 0.3 2.0 0:02.45 **java** 17081 adowling 20 0 14.3g 427064 14316 S 161.8 5.3 0:07.32 **java** 17081 adowling 20 0 14.5g 791400 14592 S 158.3 9.9 0:12.07 **java** 17081 adowling 20 0 14.5g 1.1g 14600 S 67.1 13.9 0:14.09 **java** 17081 adowling 20 0 14.5g 1.1g 14600 S 0.3 13.8 0:14.10 **java**
CPU Consumer	16934 adowling 20 0 14.5g 683936 14624 S 0.3 8.5 0:13.67 **java** 16934 adowling 20 0 14.5g 839768 14624 S 18.6 10.5 0:14.23 **java** 16934 adowling 20 0 14.5g 1.1g 14640 S 48.2 14.8 0:15.68 **java**

Spring AMQP Test 4

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	10000
GC used	EpsilonGC

MultiThreaded	YES
Completed	YES
CPU Producer	17081 adowling 20 0 14.5g 1.1g 14600 S 0.3 13.8 0:14.15 java 17169 adowling 20 0 14.2g 86176 13048 S 29.6 1.1 0:00.89 java 17169 adowling 20 0 14.3g 158068 13640 S 51.8 2.0 0:02.45 java 17169 adowling 20 0 14.3g 173856 13896 S 10.6 2.2 0:02.77 java 17169 adowling 20 0 14.5g 492536 14488 S 185.0 6.1 0:08.34 java 17169 adowling 20 0 14.5g 653876 14544 S 116.3 8.2 0:11.83 java 17169 adowling 20 0 14.5g 676260 14636 S 43.5 8.4 0:13.14 java 17169 adowling 20 0 14.5g 696508 14648 S 41.9 8.7 0:14.40 java 17169 adowling 20 0 14.5g 709756 14648 S 24.3 8.9 0:15.13 java 17169 adowling 20 0 14.5g 739756 14656 S 35.2 9.2 0:16.19 java 17169 adowling 20 0 14.5g 740092 14664 S 5.0 9.2 0:16.34 java 17169 adowling 20 0 14.5g 740092 14664 S 0.3 9.2 0:16.35 java
CPU Consumer	16934 adowling 20 0 14.5g 1.1g 14640 S 0.3 14.8 0:15.76 java 16934 adowling 20 0 14.5g 1.1g 14640 S 22.3 14.9 0:16.43 java 16934 adowling 20 0 14.5g 1.2g 14640 S 46.8 15.1 0:17.84 java 16934 adowling 20 0 14.5g 1.2g 14640 S 27.6 15.3 0:18.67 java 16934 adowling 20 0 14.5g 1.2g 14648 S 26.2 15.4 0:19.46 java 16934 adowling 20 0 14.5g 1.2g 14648 S 24.6 15.6 0:20.20 java 16934 adowling 20 0 14.5g 1.2g 14648 S 0.3 15.6 0:20.21 java 16934 adowling 20 0 14.5g 1.2g 14648 S 0.3 15.6 0:20.22 java

Spring AMQP Test 5

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	100000
GC used	EpsilonGC
MultiThreaded	YES
Completed	YES
CPU Producer	17169 adowling 20 0 14.5g 740092 14664 S 0.3 9.2 0:16.42 java 17277 adowling 20 0 14.3g 163452 13656 S 75.4 2.0 0:02.27 java 17277 adowling 20 0 14.3g 376480 14292 S 127.9 4.7 0:06.12 java 17277 adowling 20 0 14.5g 660000 14560 S 168.0 8.2 0:11.16 java 17277 adowling 20 0 14.5g 769312 14632 S 47.2 9.6 0:12.58 java 17277 adowling 20 0 14.5g 873116 14644 S 46.8 10.9 0:13.99 java 17277 adowling 20 0 14.5g 980792 14656 S 40.9 12.2 0:15.22 java 17277 adowling 20 0 14.5g 1.0g 14656 S 29.6 13.6 0:16.11 java 17277 adowling 20 0 14.5g 1.1g 14680 S 51.2 14.9 0:17.65 java

	17277 adowling 20 0 14.5g 1.1g 14680 S 0.3 14.9 0:17.66 **java**
CPU Consumer	16934 adowling 20 0 14.5g 1.3g 14648 S 28.6 16.5 0:21.15 **java** 16934 adowling 20 0 14.5g 1.3g 14648 S 27.6 17.6 0:21.98 **java** 16934 adowling 20 0 14.5g 1.4g 14648 S 25.2 18.7 0:22.74 **java** 16934 adowling 20 0 14.5g 1.5g 14648 S 24.3 19.8 0:23.47 **java** 16934 adowling 20 0 14.5g 1.6g 14648 S 30.2 20.8 0:24.38 **java**

Spring AMQP Test 6

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	1000000
GC used	EpsilonGC
MultiThreaded	YES
Completed	YES
CPU Producer	17277 adowling 20 0 14.5g 1.1g 14684 S 0.3 14.9 0:17.70 **java** 17367 adowling 20 0 14.3g 157796 13652 S 76.7 2.0 0:02.31 **java** 17367 adowling 20 0 14.3g 383372 14280 S 128.1 4.8 0:06.18 **java** 17367 adowling 20 0 14.5g 770936 14556 S 161.5 9.6 0:11.04 **java** 17367 adowling 20 0 14.5g 1.3g 14564 S 61.5 17.0 0:12.89 **java** 17367 adowling 20 0 14.5g 1.8g 14616 S 63.3 23.7 0:14.79 **java** 17367 adowling 20 0 14.5g 2.3g 14640 S 59.3 30.5 0:16.58 **java** 17367 adowling 20 0 14.5g 2.8g 14652 S 56.5 37.1 0:18.28 **java** 17367 adowling 20 0 14.5g 3.4g 14652 S 54.3 44.1 0:19.91 **java** 17367 adowling 20 0 14.5g 3.9g 14652 S 50.8 50.9 0:21.44 **java** 17367 adowling 20 0 14.5g 4.4g 14652 S 46.5 57.8 0:22.84 **java** 17367 adowling 20 0 14.5g 4.9g 14660 S 68.1 63.7 0:24.89 **java** 17367 adowling 20 0 14.5g 4.9g 14660 S 1.0 63.7 0:24.92 **java**
CPU Consumer	16934 adowling 20 0 14.5g 1.6g 14648 S 0.3 21.0 0:24.52 **java** 16934 adowling 20 0 14.5g 2.2g 14648 S 55.8 28.4 0:26.20 **java** 16934 adowling 20 0 14.5g 2.8g 14648 S 50.8 36.1 0:27.73 **java** 16934 adowling 20 0 14.5g 3.4g 14648 S 63.7 43.9 0:29.64 **java** 16934 adowling 20 0 14.5g 3.9g 14648 S 57.5 51.5 0:31.37 **java** 16934 adowling 20 0 14.5g 4.5g 14648 S 50.8 59.3 0:32.90 **java** 16934 adowling 20 0 14.5g 5.1g 14648 S 50.5 67.0 0:34.42 **java** 16934 adowling 20 0 14.5g 5.7g 14648 S 54.5 74.8 0:36.06 **java** 16934 adowling 20 0 14.5g 6.3g 14668 S 54.5 82.5 0:37.70 **java** 16934 adowling 20 0 14.5g 6.4g 14668 S 9.0 83.7 0:37.97 **java**

SPRING AMQP - G1GC - SingleThread

Spring AMQP Test 1

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	10000
GC used	G1GC
MultiThreaded	NO
Completed	YES
CPU Producer	17534 adowling 20 0 15.0g 122072 14128 S 74.8 1.5 0:02.39 java 17534 adowling 20 0 15.0g 206092 14892 S 179.1 2.6 0:07.80 java 17534 adowling 20 0 15.0g 267548 15076 S 140.0 3.3 0:12.00 java 17534 adowling 20 0 15.0g 298488 15084 S 46.2 3.7 0:13.39 java 17534 adowling 20 0 15.0g 284340 15084 S 0.3 3.6 0:13.40 java
CPU Consumer	16973 adowling 20 0 15.0g 298628 15020 S 0.3 3.7 0:12.24 java 16973 adowling 20 0 15.0g 298280 15036 S 43.5 3.7 0:13.55 java

Spring AMQP Test 2

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	100000
GC used	G1GC
MultiThreaded	NO
Completed	YES
CPU Producer	17632 adowling 20 0 15.0g 118492 14120 S 76.1 1.5 0:02.29 java 17632 adowling 20 0 15.0g 166116 14676 S 94.7 2.1 0:05.14 java 17632 adowling 20 0 15.0g 269240 15020 S 181.1 3.4 0:10.59 java 17632 adowling 20 0 15.0g 351012 15064 S 55.8 4.4 0:12.27 java
CPU Consumer	16973 adowling 20 0 15.0g 298316 15036 S 0.3 3.7 0:13.70 java 16973 adowling 20 0 15.0g 299172 15132 S 14.6 3.7 0:14.14 java 16973 adowling 20 0 15.0g 303720 15132 S 12.9 3.8 0:14.53 java

Spring AMQP Test 3

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	1000000
GC used	G1GC
MultiThreaded	NO
Completed	YES
CPU Producer	17632 adowling 20 0 15.0g 348972 15064 S 0.7 4.4 0:12.34 **java** 17713 adowling 20 0 15.0g 124352 14112 S 77.4 1.6 0:02.33 **java** 17713 adowling 20 0 15.0g 190176 14784 S 143.4 2.4 0:06.66 **java** 17713 adowling 20 0 15.0g 389656 15128 S 156.5 4.9 0:11.37 **java** 17713 adowling 20 0 15.0g 668980 15140 S 78.0 8.4 0:13.71 **java** 17713 adowling 20 0 15.0g 660128 15140 S 0.3 8.2 0:13.72 **java**
CPU Consumer	16973 adowling 20 0 15.0g 303824 15132 S 0.3 3.8 0:14.65 **java** 16973 adowling 20 0 15.0g 506524 15140 S 34.9 6.3 0:15.70 **java** 16973 adowling 20 0 15.0g 573484 15152 S 30.3 7.2 0:16.61 **java** 16973 adowling 20 0 15.0g 564956 15152 S 0.3 7.1 0:16.62 **java**

Spring AMQP Test 4

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	10000
GC used	G1GC
MultiThreaded	NO
Completed	YES
CPU Producer	17805 adowling 20 0 15.0g 212376 14748 S 148.0 2.7 0:07.29 **java** 17805 adowling 20 0 15.0g 294752 15064 S 152.5 3.7 0:11.88 **java** 17805 adowling 20 0 15.0g 297484 15144 S 48.7 3.7 0:13.34 **java** 17805 adowling 20 0 15.0g 296656 15160 S 41.9 3.7 0:14.60 **java**

	17805 adowling 20 0 15.0g 301972 15172 S 32.2 3.8 0:15.57 **java** 17805 adowling 20 0 15.0g 320996 15172 S 21.9 4.0 0:16.23 **java** 17805 adowling 20 0 15.0g 368276 15180 S 40.5 4.6 0:17.45 **java**
CPU Consumer	16973 adowling 20 0 15.0g 574176 15156 S 23.3 7.2 0:17.44 **java** 16973 adowling 20 0 15.0g 587796 15164 S 49.5 7.3 0:18.93 **java** 16973 adowling 20 0 15.0g 600484 15164 S 24.6 7.5 0:19.67 **java** 16973 adowling 20 0 15.0g 613128 15164 S 28.6 7.7 0:20.53 **java** 16973 adowling 20 0 15.0g 613380 15172 S 31.0 7.7 0:21.46 **java**

Spring AMQP Test 5

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	100000
GC used	G1GC
MultiThreaded	NO
Completed	YES
CPU Producer	17899 adowling 20 0 15.0g 123816 14120 S 82.4 1.5 0:02.48 **java** 17899 adowling 20 0 15.0g 201048 14832 S 164.5 2.5 0:07.43 **java** 17899 adowling 20 0 15.0g 297296 15072 S 161.1 3.7 0:12.28 **java** 17899 adowling 20 0 15.0g 384680 15148 S 49.5 4.8 0:13.77 **java** 17899 adowling 20 0 15.0g 499152 15164 S 50.7 6.2 0:15.29 **java** 17899 adowling 20 0 15.0g 545464 15184 S 38.7 6.8 0:16.46 **java** 17899 adowling 20 0 15.0g 545732 15184 S 25.2 6.8 0:17.22 **java** 17899 adowling 20 0 15.0g 563304 15200 S 53.5 7.0 0:18.83 **java**
CPU Consumer	16973 adowling 20 0 15.0g 613760 15172 S 17.6 7.7 0:22.30 **java** 16973 adowling 20 0 15.0g 634620 15172 S 27.2 7.9 0:23.12 **java** 16973 adowling 20 0 15.0g 725236 15172 S 31.3 9.1 0:24.06 **java** 16973 adowling 20 0 15.0g 811488 15172 S 27.2 10.1 0:24.88 **java** 16973 adowling 20 0 15.0g 900292 15172 S 30.6 11.2 0:25.80 **java** 16973 adowling 20 0 15.0g 932484 15172 S 10.3 11.6 0:26.11 **java**

Spring AMQP Test 6

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000

Message Byte Size	1000000
GC used	G1GC
MultiThreaded	NO
Completed	YES
CPU Producer	17987 adowling 20 0 15.0g 124004 14156 S 77.7 1.5 0:02.33 **java** 17987 adowling 20 0 15.0g 185388 14752 S 131.8 2.3 0:06.31 **java** 17987 adowling 20 0 15.0g 381816 15092 S 181.7 4.8 0:11.78 **java** 17987 adowling 20 0 15.0g 642304 15096 S 62.3 8.0 0:13.65 **java** 17987 adowling 20 0 15.0g 685068 15160 S 53.8 8.6 0:15.27 **java** 17987 adowling 20 0 15.0g 827592 15184 S 56.8 10.3 0:16.98 **java** 17987 adowling 20 0 15.0g 997.1m 15196 S 49.2 12.7 0:18.46 **java** 17987 adowling 20 0 15.0g 1.2g 15196 S 46.2 15.9 0:19.85 **java** 17987 adowling 20 0 15.0g 1.2g 15196 S 40.1 16.1 0:21.06 **java** 17987 adowling 20 0 15.0g 1.4g 15204 S 54.2 18.2 0:22.69 **java**
CPU Consumer	16973 adowling 20 0 15.0g 1.0g 15172 S 21.3 13.7 0:26.89 **java** 16973 adowling 20 0 15.0g 1.3g 15172 S 50.8 16.4 0:28.42 **java** 16973 adowling 20 0 15.0g 1.3g 15172 S 49.2 16.8 0:29.90 **java** 16973 adowling 20 0 15.0g 1.3g 15172 S 34.6 16.8 0:30.94 **java** 16973 adowling 20 0 15.0g 1.3g 15172 S 39.2 16.8 0:32.12 **java** 16973 adowling 20 0 15.0g 1.3g 15172 S 35.8 16.8 0:33.20 **java** 16973 adowling 20 0 15.0g 1.3g 15172 S 36.5 16.8 0:34.30 **java** 16973 adowling 20 0 15.0g 1.3g 15188 S 23.3 16.8 0:35.00 **java**

SPRING AMQP - G1GC - MultiThread

Spring AMQP Test 1

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	10000
GC used	G1GC
MultiThreaded	YES
Completed	YES
CPU Producer	18174 adowling 20 0 15.0g 118092 14148 S 78.7 1.5 0:02.37 **java** 18174 adowling 20 0 15.0g 177276 14736 S 110.3 2.2 0:05.69 **java** 18174 adowling 20 0 15.0g 273236 15088 S 170.8 3.4 0:10.83 **java** 18174 adowling 20 0 15.0g 305516 15096 S 57.0 3.8 0:12.54 **java**

CPU Consumer	17025 adowling 20 0 15.0g 271340 15040 S 0.3 3.4 0:12.93 **java** 17025 adowling 20 0 15.0g 276544 15056 S 47.8 3.5 0:14.37 **java** 17025 adowling 20 0 15.0g 276548 15056 S 0.3 3.5 0:14.38 **java**

Spring AMQP Test 2

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	100000
GC used	G1GC
MultiThreaded	YES
Completed	YES
CPU Producer	18280 adowling 20 0 14.3g 22544 7044 S 1.0 0.3 0:00.03 **java** 18280 adowling 20 0 15.0g 116560 14124 S 79.1 1.5 0:02.41 **java** 18280 adowling 20 0 15.0g 219500 14848 S 171.1 2.7 0:07.56 **java** 18280 adowling 20 0 15.0g 302268 15064 S 147.8 3.8 0:12.01 **java** 18280 adowling 20 0 15.0g 345924 15068 S 38.2 4.3 0:13.16 **java**
CPU Consumer	17025 adowling 20 0 15.0g 276568 15056 S 0.3 3.5 0:14.53 **java** 17025 adowling 20 0 15.0g 277932 15152 S 25.2 3.5 0:15.29 **java** 17025 adowling 20 0 15.0g 277932 15152 S 0.3 3.5 0:15.30 **java**

Spring AMQP Test 3

Date	16/03/2020
Library	Spring AMQP
Message Volume	100
Message Byte Size	1000000
GC used	G1GC
MultiThreaded	YES
Completed	YES
CPU Producer	18363 adowling 20 0 15.0g 123756 13888 S 71.8 1.5 0:02.16 **java** 18363 adowling 20 0 15.0g 125192 14120 S 10.6 1.6 0:02.48 **java** 18363 adowling 20 0 15.0g 142060 14552 S 56.1 1.8 0:04.17 **java**

	18363 adowling 20 0 15.0g 289884 15072 S 182.7 3.6 0:09.67 java 18363 adowling 20 0 15.0g 689928 15112 S 103.7 8.6 0:12.79 java 18363 adowling 20 0 15.0g 686712 15120 S 25.6 8.6 0:13.56 java
CPU Consumer	17025 adowling 20 0 15.0g 477848 15160 S 32.6 6.0 0:16.39 java 17025 adowling 20 0 15.0g 650644 15180 S 27.2 8.1 0:17.21 java

Spring AMQP Test 4

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	10000
GC used	G1GC
MultiThreaded	YES
Completed	YES
CPU Producer	18450 adowling 20 0 15.0g 110352 13780 S 50.5 1.4 0:01.52 java 18450 adowling 20 0 15.0g 122016 14112 S 32.2 1.5 0:02.49 java 18450 adowling 20 0 15.0g 137244 14436 S 30.9 1.7 0:03.42 java 18450 adowling 20 0 15.0g 278644 14996 S 192.0 3.5 0:09.20 java 18450 adowling 20 0 15.0g 315688 15144 S 98.0 3.9 0:12.15 java 18450 adowling 20 0 15.0g 309392 15172 S 40.0 3.9 0:13.35 java 18450 adowling 20 0 15.0g 312768 15188 S 42.5 3.9 0:14.63 java 18450 adowling 20 0 15.0g 313384 15188 S 26.2 3.9 0:15.42 java 18450 adowling 20 0 15.0g 342208 15200 S 43.2 4.3 0:16.72 java 18450 adowling 20 0 15.0g 355768 15200 S 21.6 4.4 0:17.37 java
CPU Consumer	17025 adowling 20 0 15.0g 650976 15180 S 9.3 8.1 0:17.59 java 17025 adowling 20 0 15.0g 652808 15180 S 47.5 8.2 0:19.02 java 17025 adowling 20 0 15.0g 653236 15180 S 24.9 8.2 0:19.77 java 17025 adowling 20 0 15.0g 653560 15188 S 24.3 8.2 0:20.50 java 17025 adowling 20 0 15.0g 653764 15188 S 27.2 8.2 0:21.32 java 17025 adowling 20 0 15.0g 654120 15188 S 10.3 8.2 0:21.63 java

Spring AMQP Test 5

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000

Message Byte Size	100000
GC used	G1GC
MultiThreaded	YES
Completed	YES
CPU Producer	18545 adowling 20 0 15.0g 122840 14124 S 83.4 1.5 0:02.51 java 18545 adowling 20 0 15.0g 176436 14628 S 116.3 2.2 0:06.01 java 18545 adowling 20 0 15.0g 282320 15080 S 176.4 3.5 0:11.32 java 18545 adowling 20 0 15.0g 387644 15128 S 51.3 4.8 0:12.86 java 18545 adowling 20 0 15.0g 456708 15180 S 48.5 5.7 0:14.32 java 18545 adowling 20 0 15.0g 458004 15192 S 39.2 5.7 0:15.50 java 18545 adowling 20 0 15.0g 485752 15192 S 27.2 6.1 0:16.32 java 18545 adowling 20 0 15.0g 579404 15200 S 44.5 7.2 0:17.66 java
CPU Consumer	17025 adowling 20 0 15.0g 654400 15192 S 24.9 8.2 0:22.49 java 17025 adowling 20 0 15.0g 658716 15192 S 28.9 8.2 0:23.36 java 17025 adowling 20 0 15.0g 745088 15192 S 26.2 9.3 0:24.15 java 17025 adowling 20 0 15.0g 835692 15192 S 27.9 10.4 0:24.99 java 17025 adowling 20 0 15.0g 923836 15192 S 32.2 11.5 0:25.96 java 17025 adowling 20 0 15.0g 929980 15192 S 1.7 11.6 0:26.01 java

Spring AMQP Test 6

Date	16/03/2020
Library	Spring AMQP
Message Volume	1000
Message Byte Size	1000000
GC used	G1GC
MultiThreaded	YES
Completed	YES
CPU Producer	18641 adowling 20 0 15.0g 117804 14124 S 0.3 1.5 0:02.34 java 18641 adowling 20 0 15.0g 242696 15008 S 176.2 3.0 0:07.68 java 18641 adowling 20 0 15.0g 529008 15124 S 133.7 6.6 0:11.69 java 18641 adowling 20 0 15.0g 860548 15172 S 55.8 10.7 0:13.37 java 18641 adowling 20 0 15.0g 1.4g 15176 S 66.4 17.9 0:15.37 java 18641 adowling 20 0 15.0g 1.4g 15188 S 47.5 17.9 0:16.80 java 18641 adowling 20 0 15.0g 1.4g 15188 S 46.8 17.9 0:18.21 java 18641 adowling 20 0 15.0g 1.4g 15188 S 41.2 17.9 0:19.45 java 18641 adowling 20 0 15.0g 1.4g 15188 S 45.5 17.9 0:20.82 java 18641 adowling 20 0 15.0g 1.4g 15196 S 58.5 18.2 0:22.58 java
CPU Consumer	17025 adowling 20 0 15.0g 979136 15192 S 5.6 12.2 0:26.31 java 17025 adowling 20 0 15.0g 1.1g 15192 S 47.8 14.0 0:27.75 java

```
17025 adowling  20  0  15.0g  1.1g  15192 S  34.6 14.4  0:28.79 java
17025 adowling  20  0  15.0g  1.1g  15192 S  46.0 14.5  0:30.17 java
17025 adowling  20  0  15.0g  1.1g  15192 S  39.9 14.4  0:31.37 java
17025 adowling  20  0  15.0g  1.1g  15192 S  35.9 14.4  0:32.45 java
17025 adowling  20  0  15.0g  1.1g  15192 S  42.9 14.4  0:33.74 java
17025 adowling  20  0  15.0g  1.1g  15208 S  39.5 14.4  0:34.93 java
```