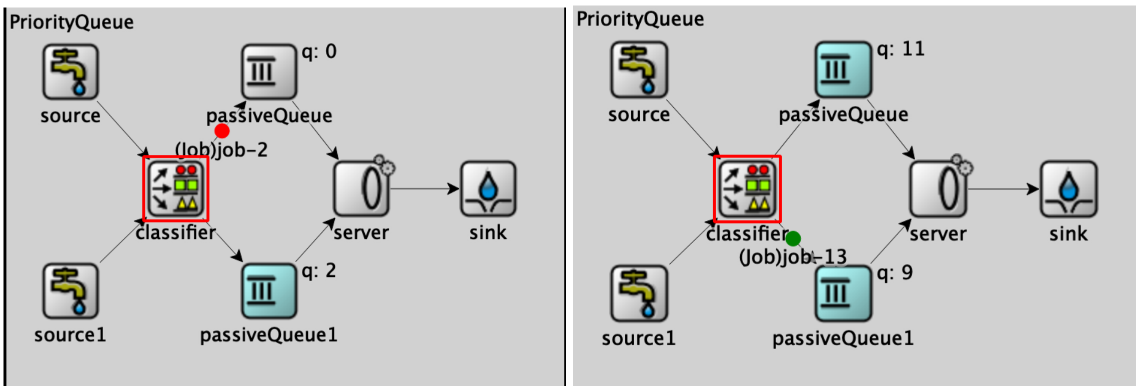
**.source.interArrivalTim	exponential(1.0s)
**.source1.interArrivalTi	exponential(1.0s)
**.server.serviceTime	exponential(2.2s)
**.source.numJobs	10000
**.source.jobType	0
**.source1.numJobs	10000
**.source1.jobType	1



PriorityQueue.sink	
delaysVisited:max (scalar)	0.0
delaysVisited:mean (scalar)	0.0
generation:max (scalar)	0.0
generation:mean (scalar)	0.0
lifeTime:max (scalar)	33712.686579378
lifeTime:mean (scalar)	16768.416383712
lifeTime:vector (vector)	16768.416383712 (20000)
queuesVisited:max (scalar)	2.0
queuesVisited:mean (scalar)	1.9999
totalDelayTime:max (scalar)	0.0
totalDelayTime:mean (scalar)	0.0
totalQueueingTime:max (scalar)	33709.077138697
totalQueueingTime:mean (scalar)	16766.231004152
totalServiceTime:max (scalar)	22.982243771956
totalServiceTime:mean (scalar)	2.1853795600127
PriorityQueue.source	
created:last (scalar)	10000.0
PriorityQueue.source1	
created:last (scalar)	10000.0

PriorityQueue.passiveQueue	
dropped:count (scalar)	0.0
queueingTime:max (scalar)	33709.077138697
queueingTime:mean (scalar)	27579.039536533
queueLength:max (scalar)	9999.0
queueLength:timeavg (scalar)	6309.1510527288
queueLength:vector (vector)	4999.250012500625 (19999)
PriorityQueue.passiveQueue1	
dropped:count (scalar)	0.0
queueingTime:max (scalar)	11799.013657356
queueingTime:mean (scalar)	5956.1803757249
queueLength:max (scalar)	5551.0
queueLength:timeavg (scalar)	1362.7088012965
queueLength:vector (vector)	2738.899155042248 (20001)
PriorityQueue.server	
busy:timeavg (scalar)	0.99998179126346

From these results, we see that the first queue had a much greater queueing time than the second queue. It attracted more jobs, on average, to supply the server.

For the class 1 scenario, we can find rho (p) using the average queue length:

$$W_1 = \frac{R}{1-\rho_1}$$

<u>Find rho:</u>

$6309.15 = p^2/(1-p)$

$6309.15-6309.15p = p^2$

$p^2 = 6309.15/6310.15$

$p = sqrt(0.99984)$

$p = 0.9999199$

$W_1 = R/(1-p)$

$W_1 = 2.185/(1-0.9999199) =$ **27278.40**

This value is very close to the observed **27,579**.

<u>For the second queue, the same equation is used to find rho:</u>

$1362.7 = p^2/(1-p)$

$p = 0.9996299315$

$W_2 = 2.185/(1-0.9996299315) =$ **5905**

This value is very close to the observed **5956**