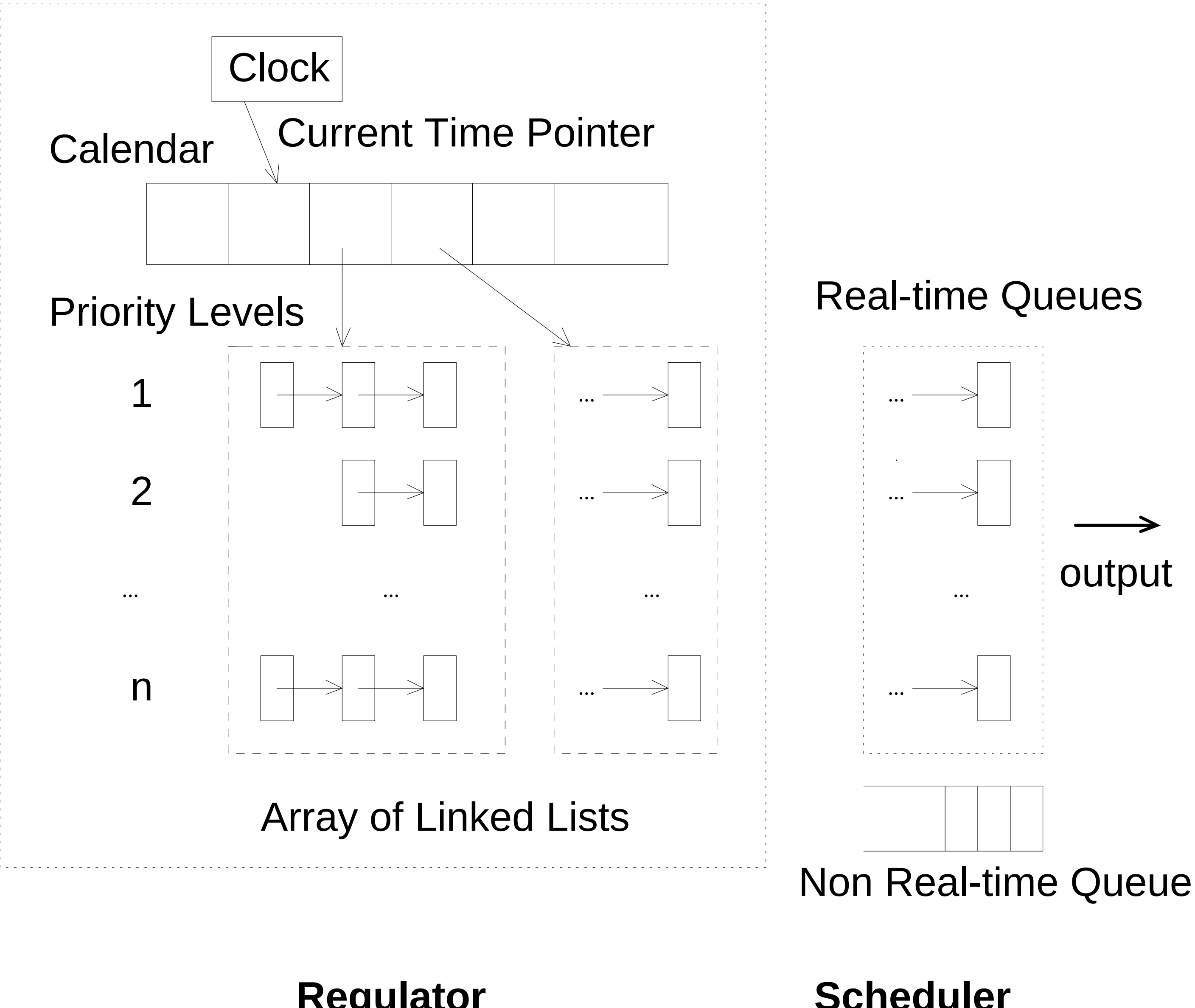
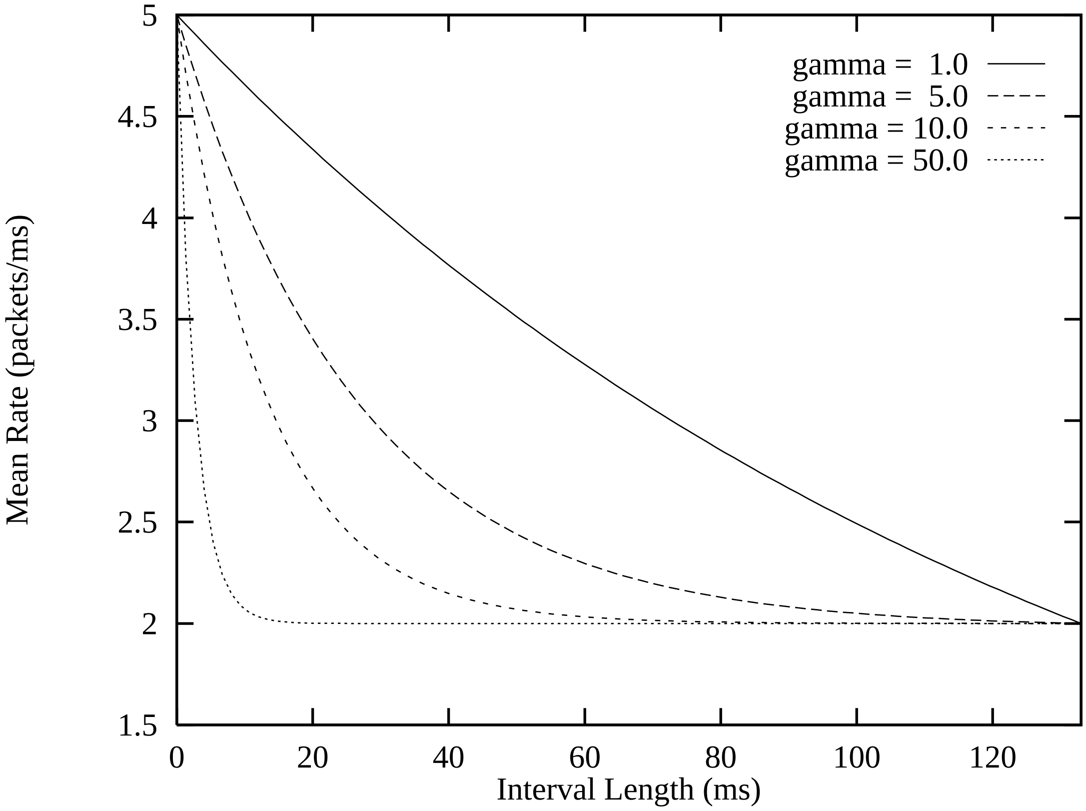
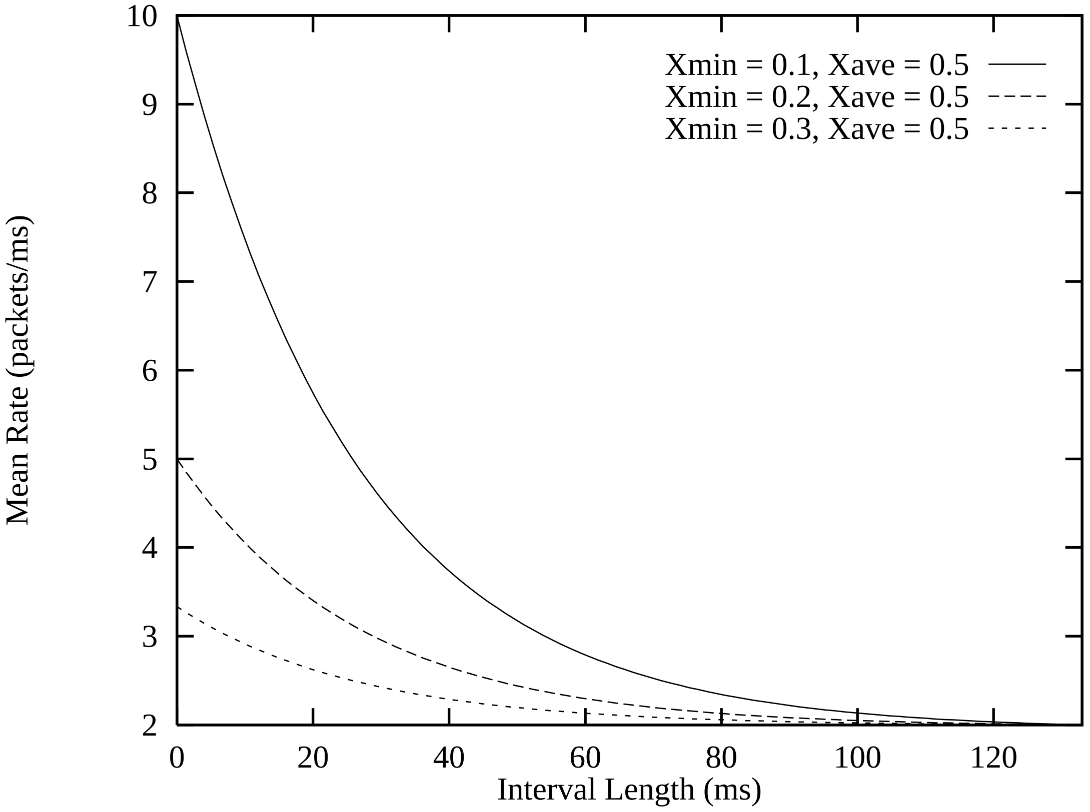
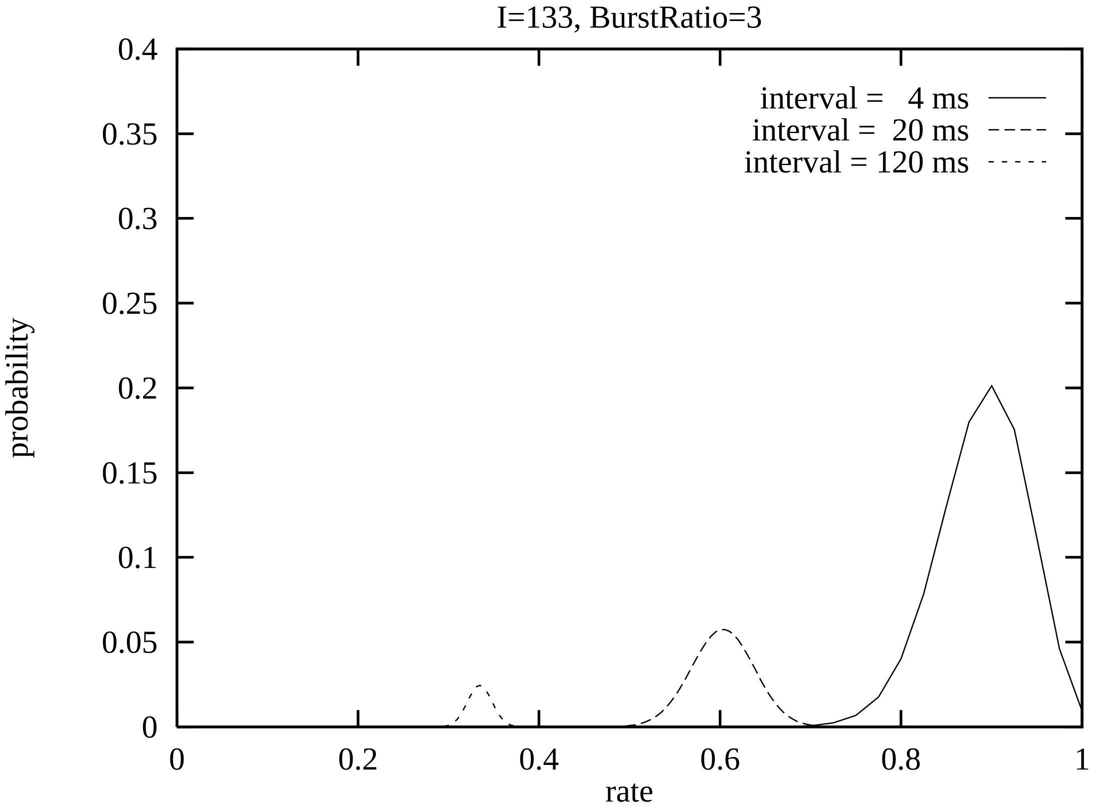
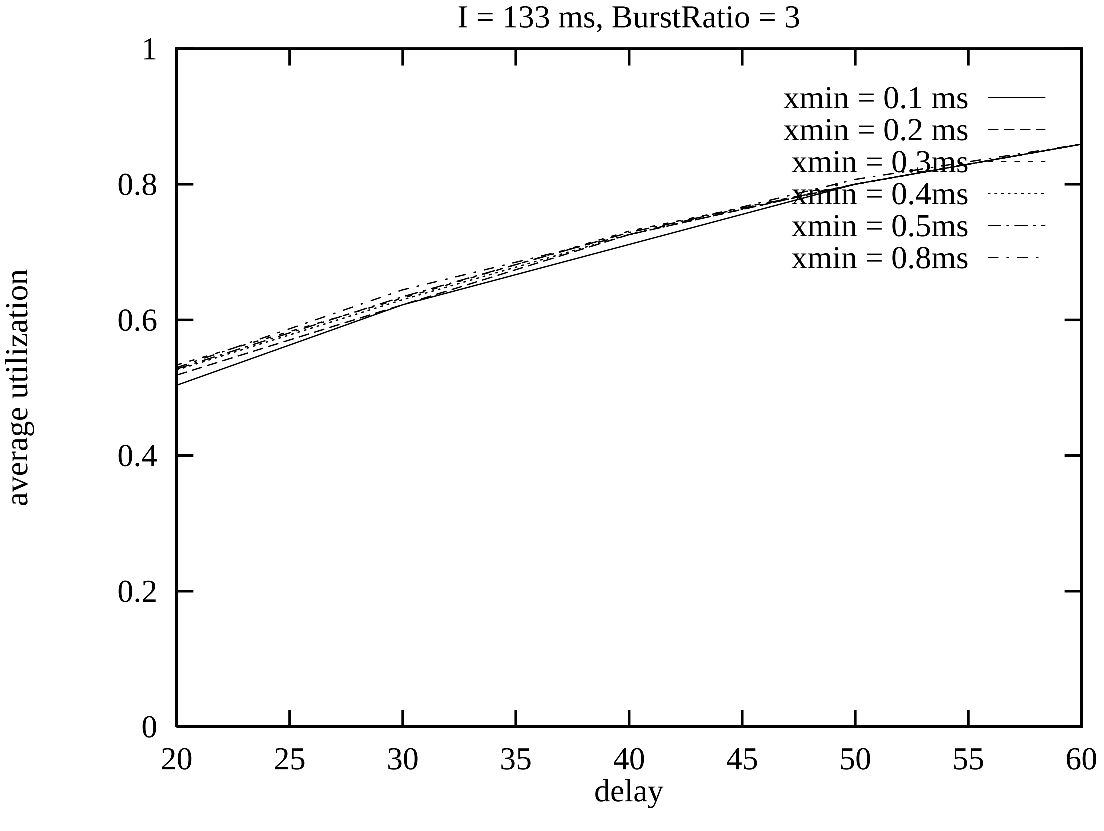

Clock
Calendar
Current Time Pointer
Priority Levels
1
2
...
n
Array of Linked Lists
Real-time Queues
output
Non Real-time Queue
Regulator
Scheduler



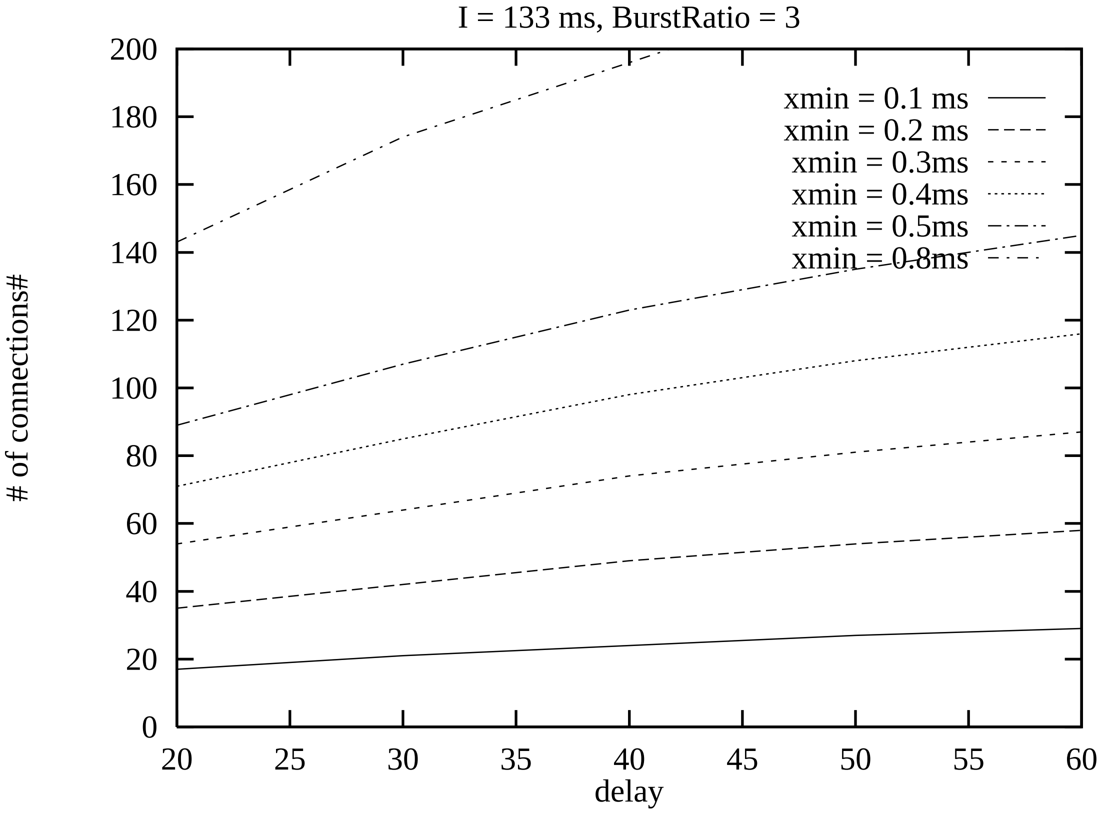
Mean Rate (packets/ms)
5
4.5
4
3.5
3
2.5
2
1.5
0
20
40
60
80
100
120
Interval Length (ms)
gamma = 1.0
gamma = 5.0
gamma = 10.0
gamma = 50.0


Xmin = 0.1, Xave = 0.5
Xmin = 0.2, Xave = 0.5
Xmin = 0.3, Xave = 0.5
Mean Rate (packets/ms)
Interval Length (ms)
10
9
8
7
6
5
4
3
2
0
20
40
60
80
100
120


I=133, BurstRatio=3
probability
rate
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0
0.2
0.4
0.6
0.8
1
interval = 4 ms
interval = 20 ms
interval = 120 ms



I = 133 ms, BurstRatio = 3
average utilization
delay
0
0.2
0.4
0.6
0.8
1
20
25
30
35
40
45
50
55
60
xmin = 0.1 ms
xmin = 0.2 ms
xmin = 0.3ms
xmin = 0.4ms
xmin = 0.5ms
xmin = 0.8ms


I = 133 ms, BurstRatio = 3
# of connections#
delay
0
20
40
60
80
100
120
140
160
180
200
20
25
30
35
40
45
50
55
60
xmin = 0.1 ms
xmin = 0.2 ms
xmin = 0.3ms
xmin = 0.4ms
xmin = 0.5ms
xmin = 0.8ms