به نام خدا

گزارش تمرین شماره 2 شبیه‌سازی **JMT**

حسام تاج‌بخش

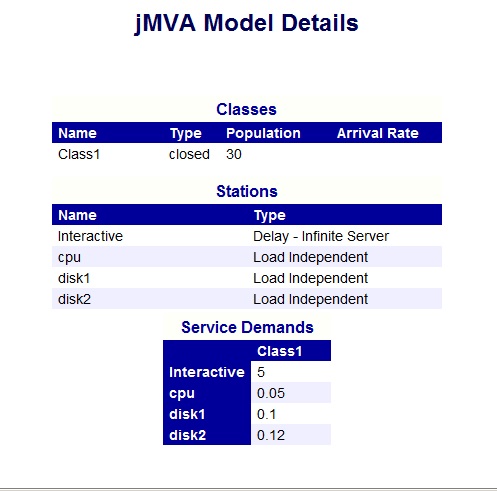
93725102

استاد: دکتر آنالویی

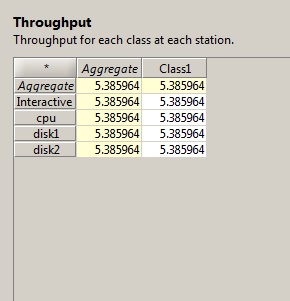
زمستان 93

Part A:

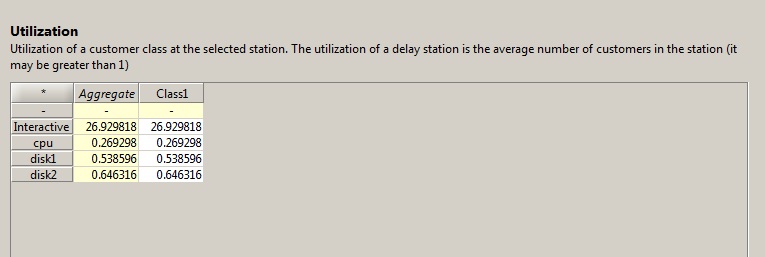
Service demand of transaction at each resource:



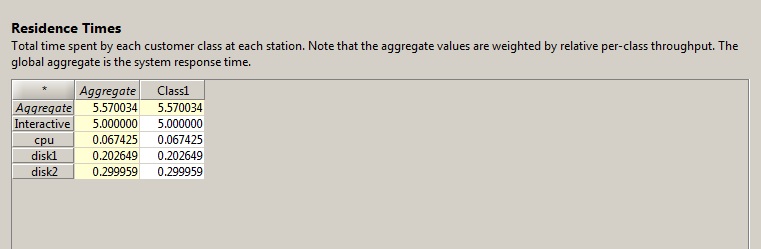
System throughput and throughput of each resource:



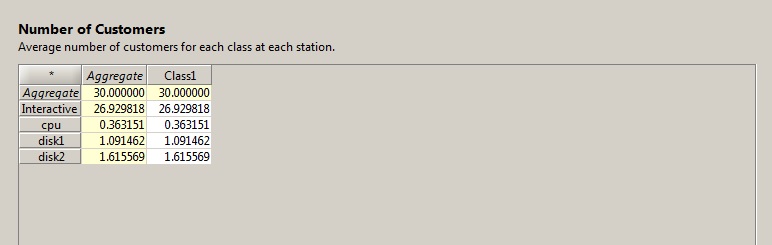
Utilization of each resource:



Residence time of transaction at each resource and system response time (aggregate response time) :



Number of transaction at system and each resource:



Part B:

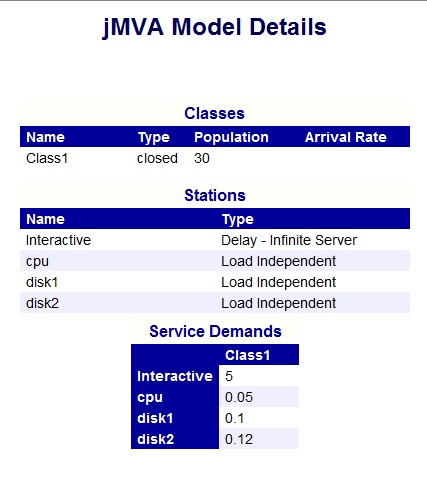
1.453

0.179s

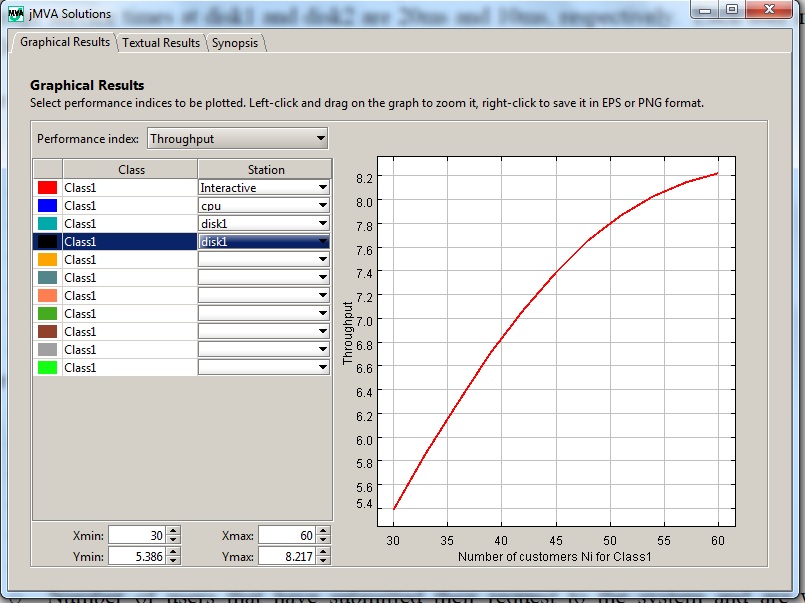
Part C:

Scenario 1: Doubling the number of terminals:

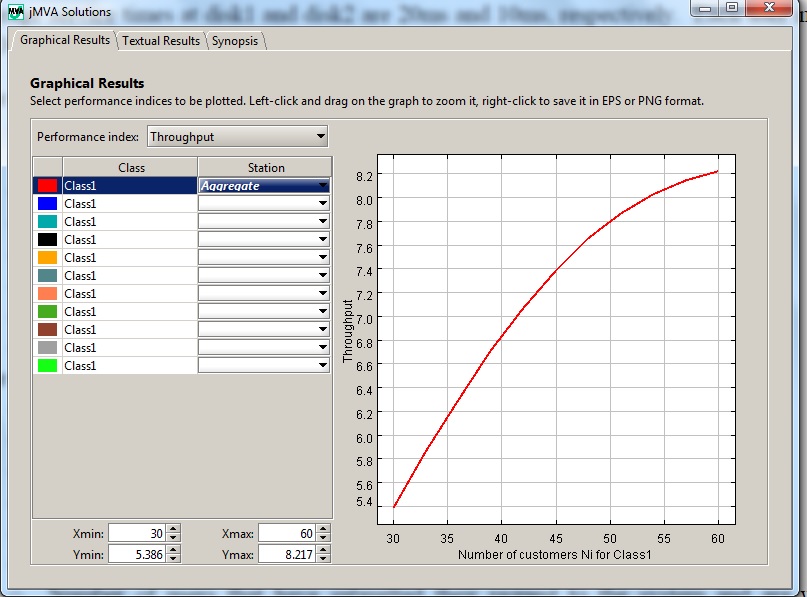
Service demand:



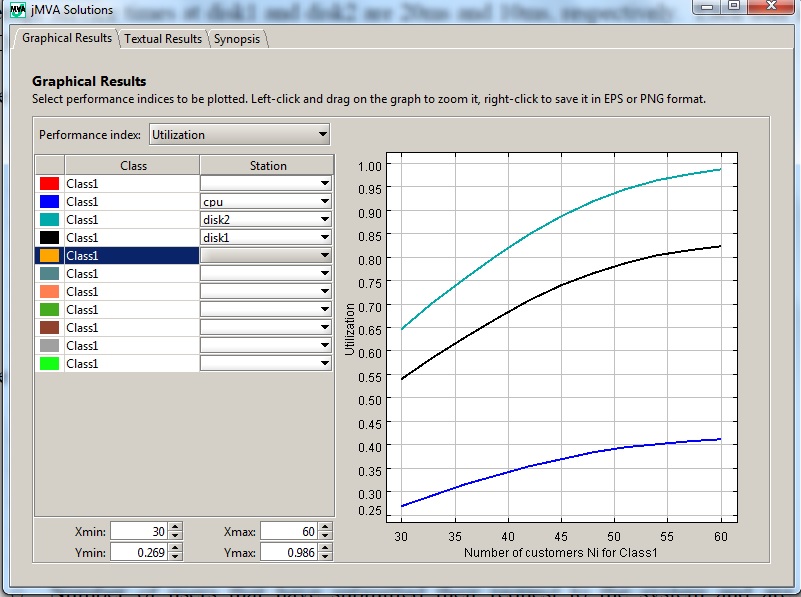
Throughput of each resource:



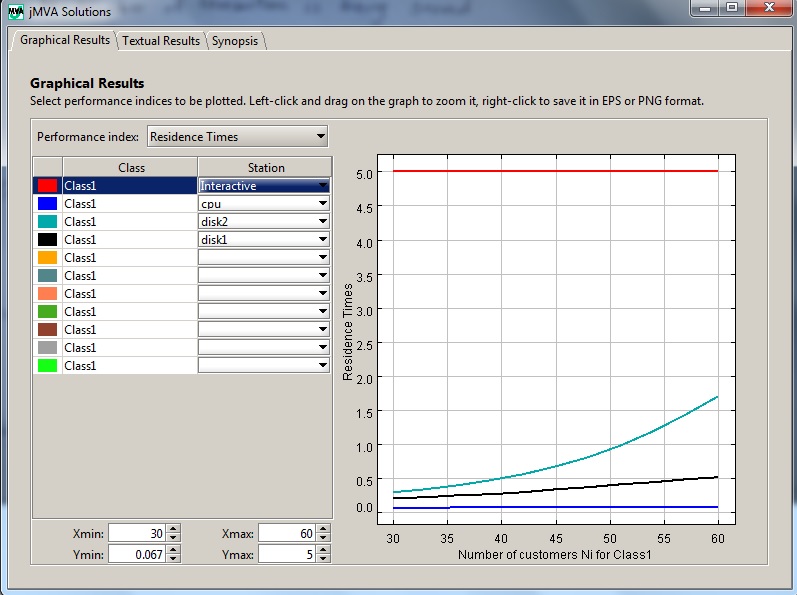
Throughput of system :



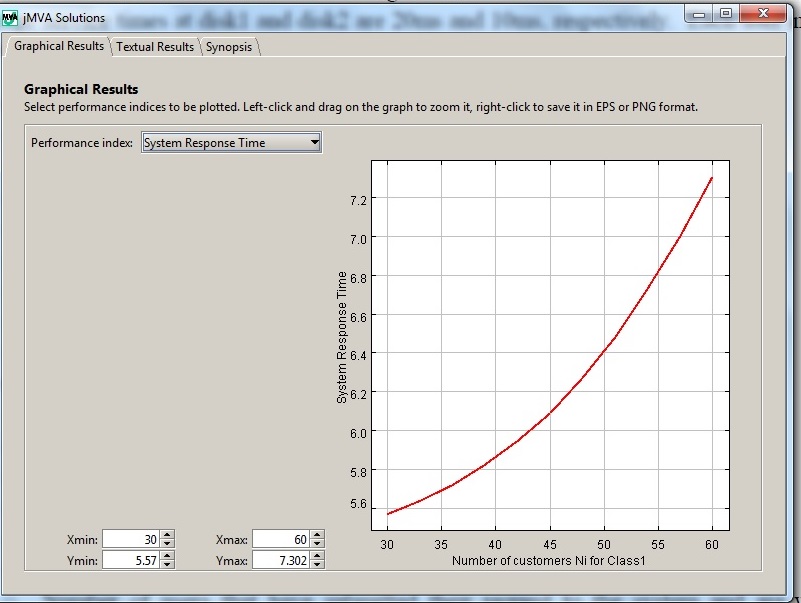
Utilization of each resource:



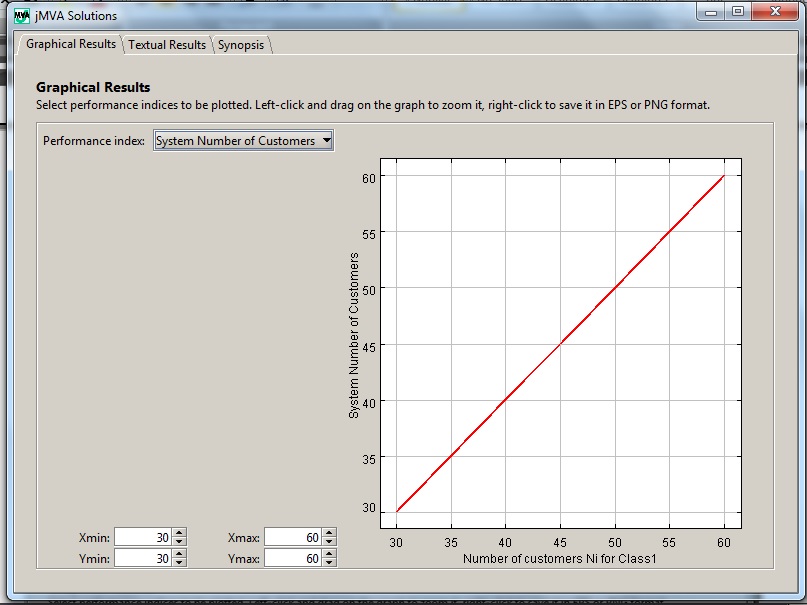
Residence time of transaction at each resource:



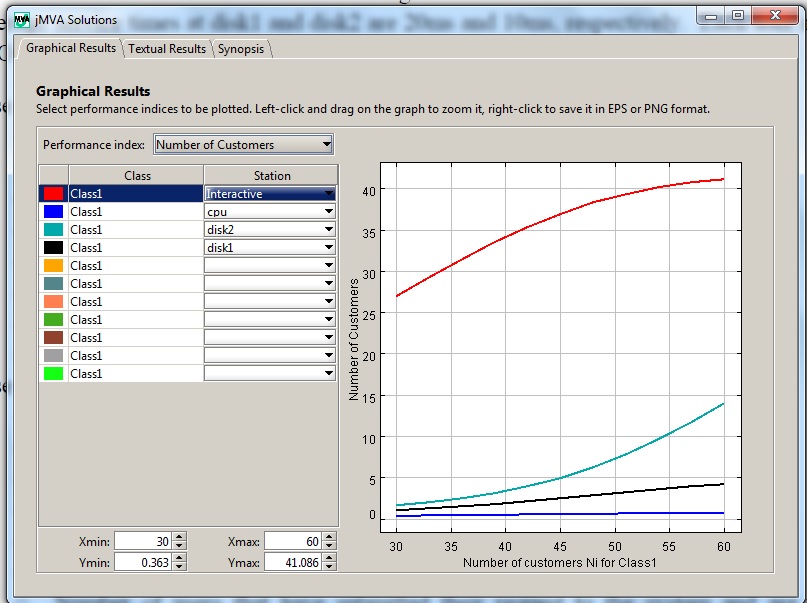
System response time:



Number of user’s transaction in the system:



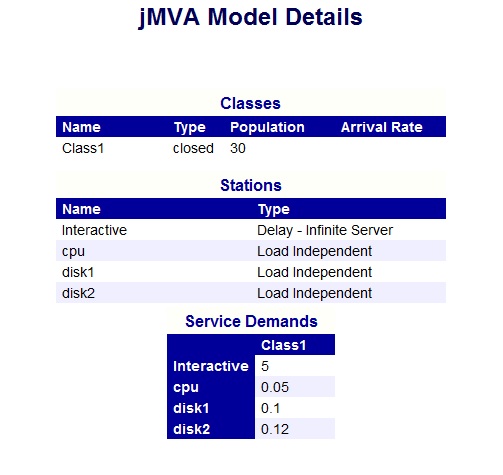
Number of user’s transaction in each resource:



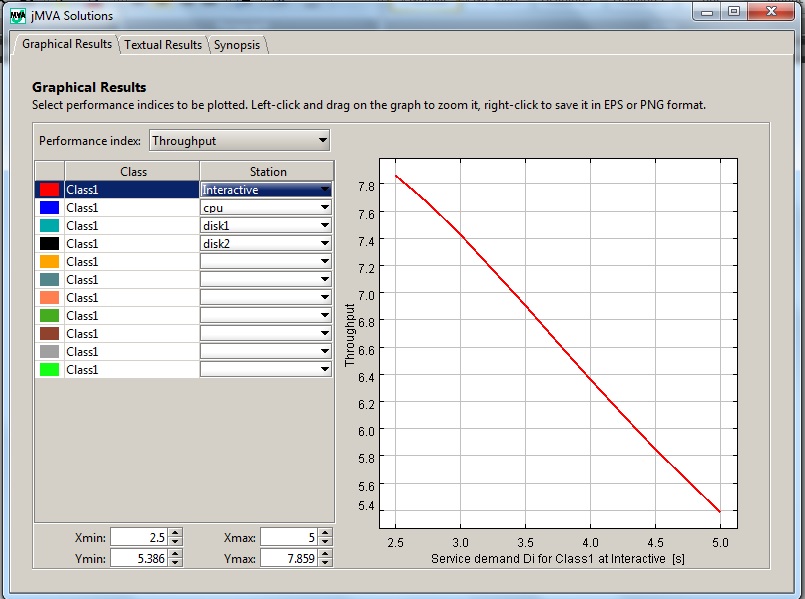
Scenario 2:

Scenario 1: Decreasing of think time by 50%

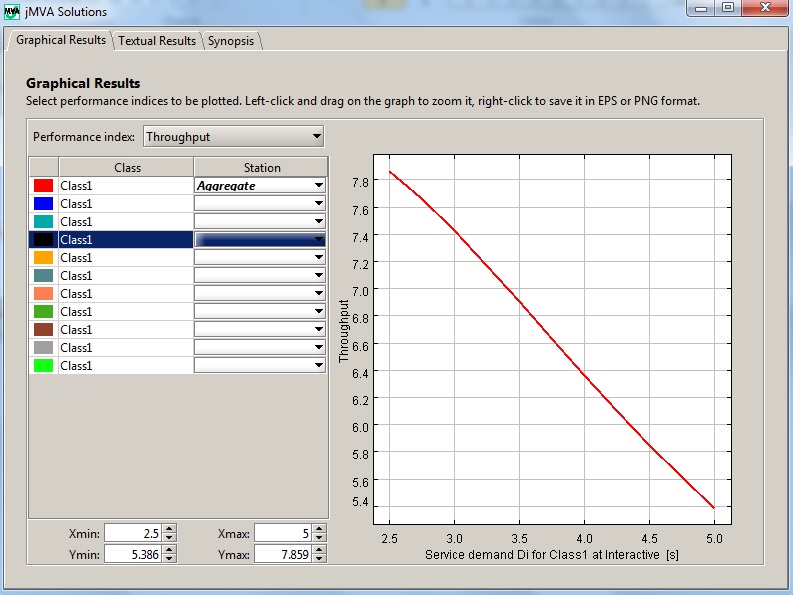
Service demand:



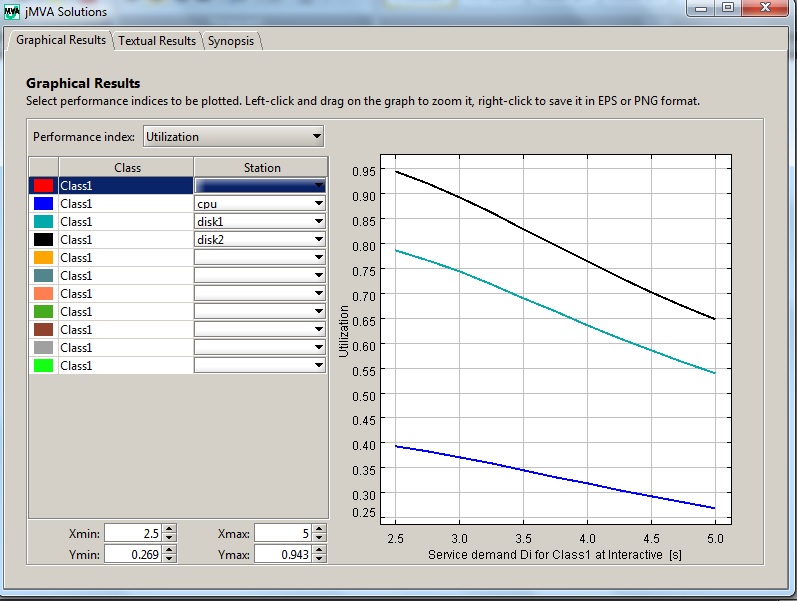
Throughput of each resource:

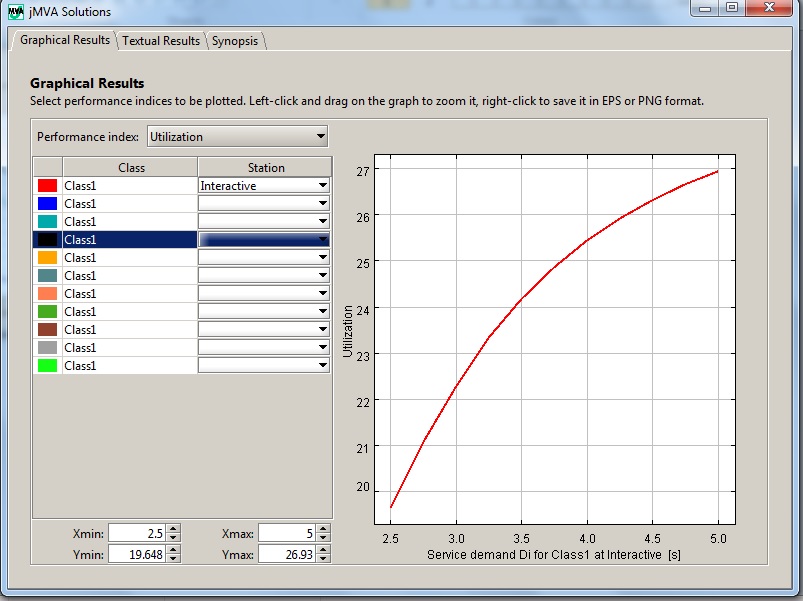


Throughput of system :

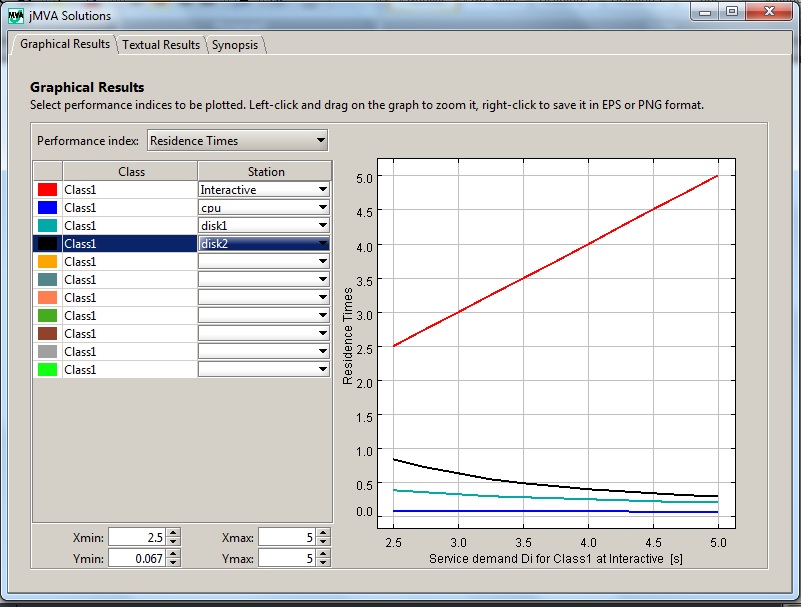


Utilization of each resource:

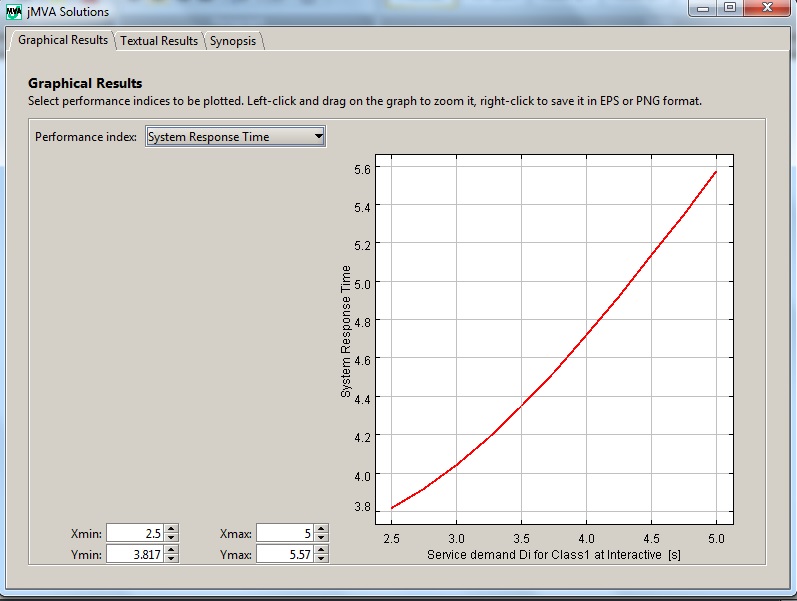




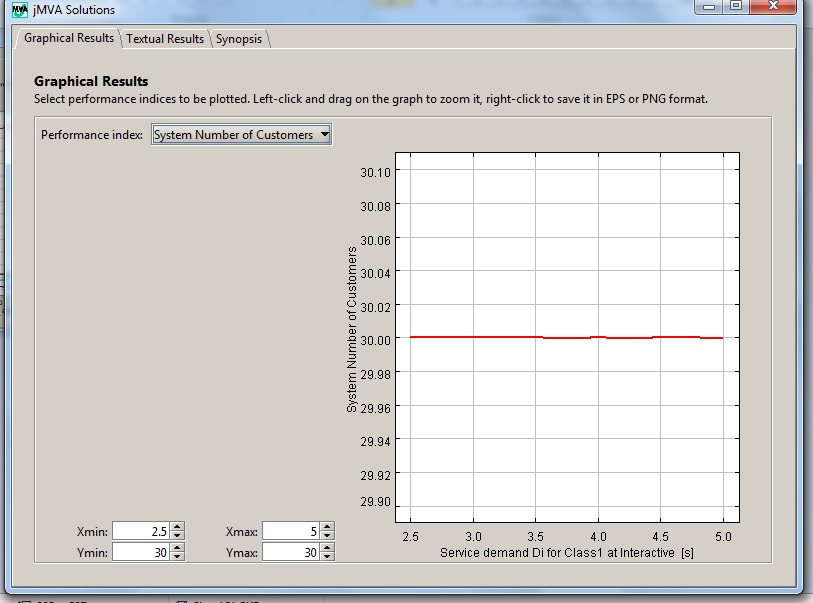
Residence time of transaction at each resource:



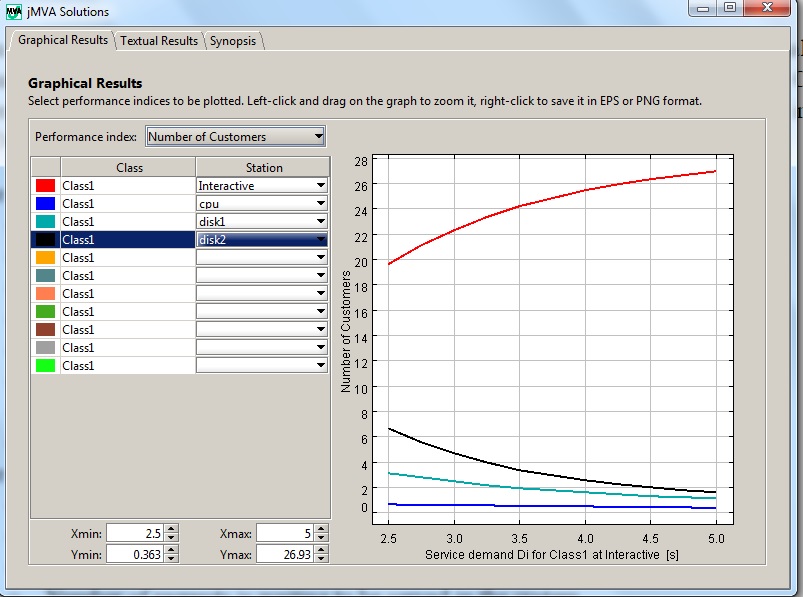
System response time:



Number of user’s transaction in the system:

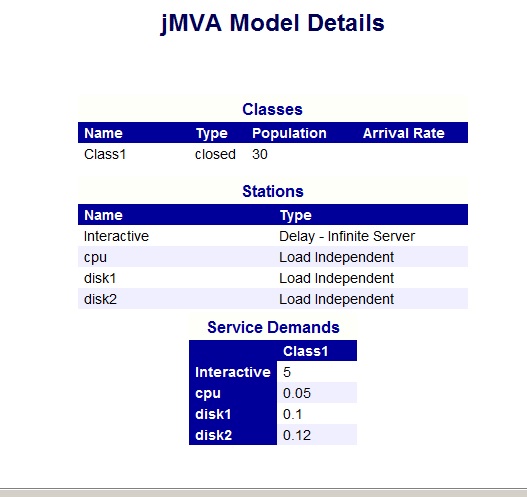


Number of user’s transaction in each resource:

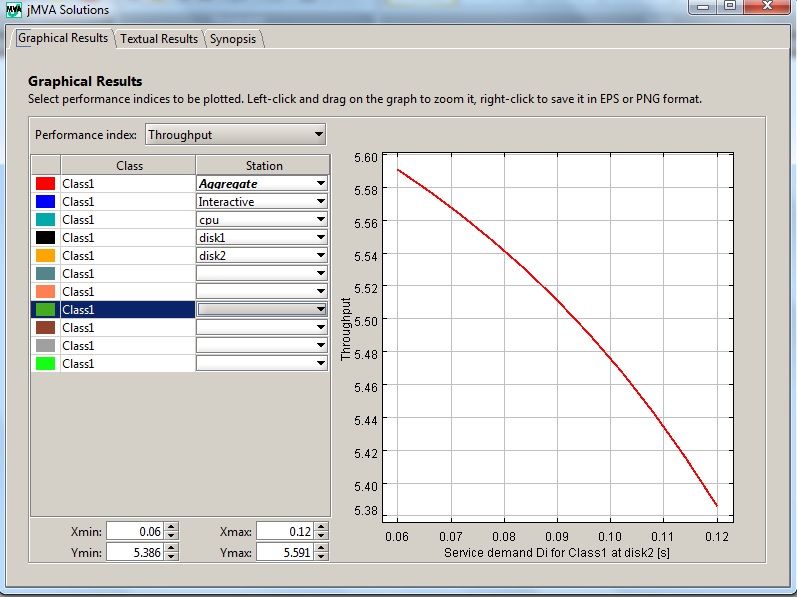


Scenario 3: using faster resource:

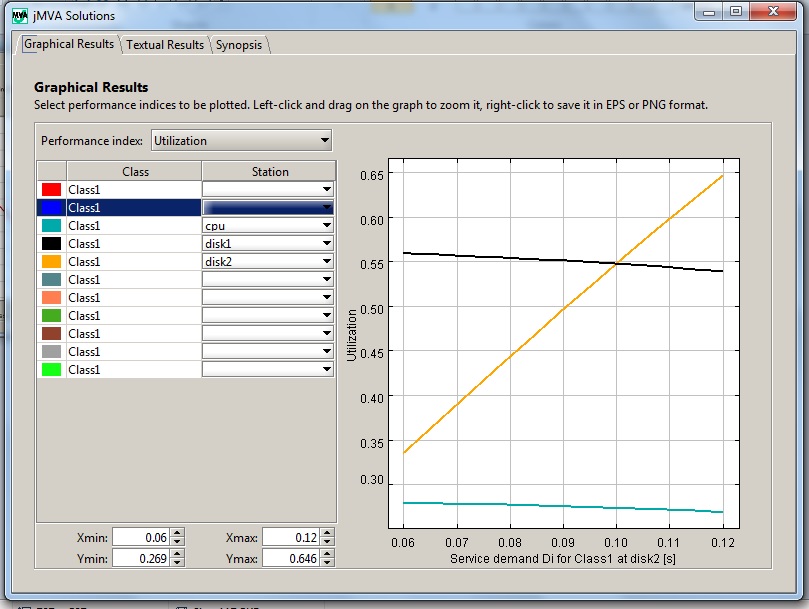
Service demand:



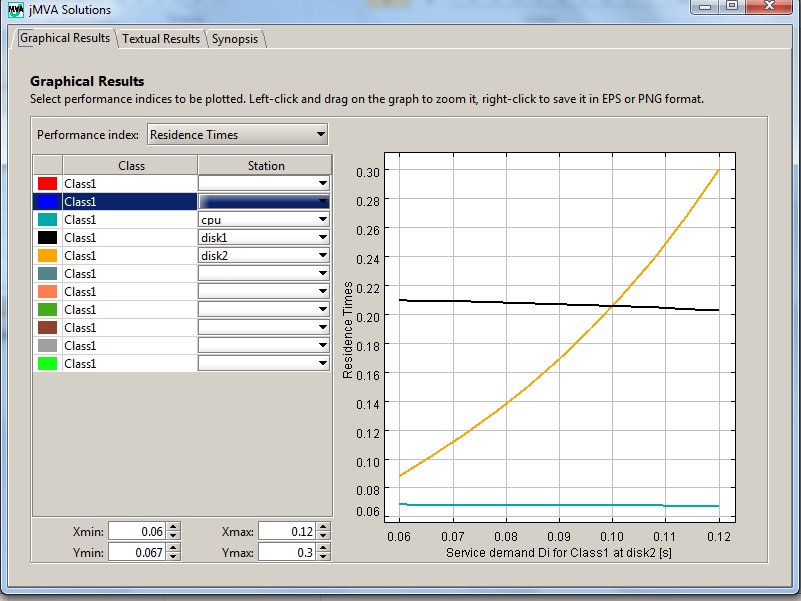
Throughput of each resource and system:



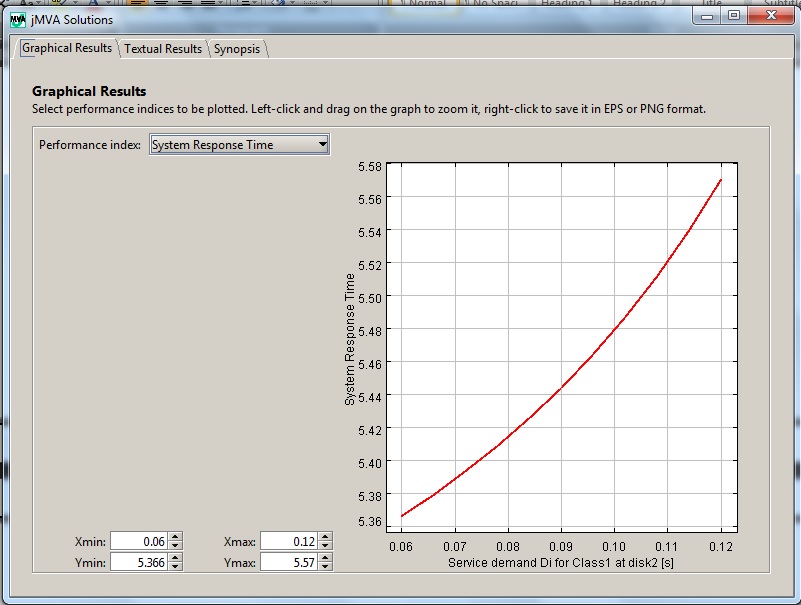
Utilization of each resource:



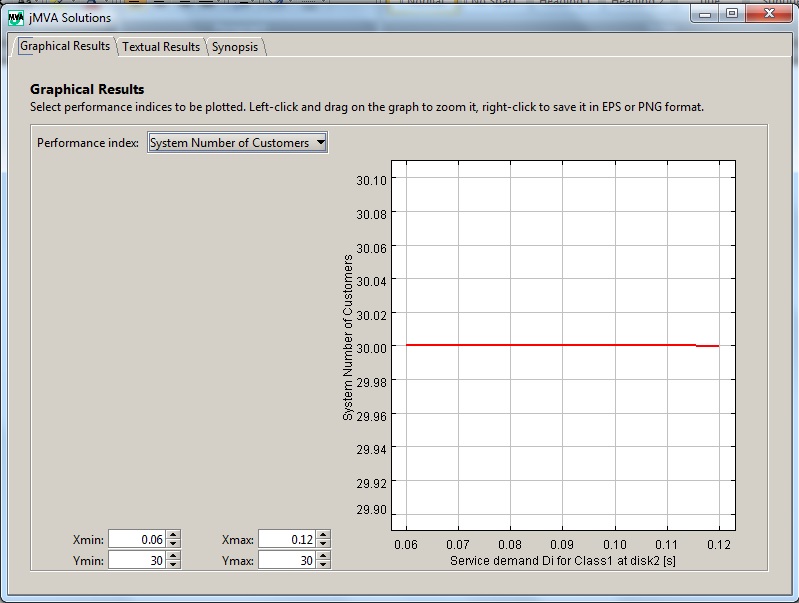
Residence time of transaction at each resource:



System response time:



Number of user’s transaction in the system:



Number of user’s transaction in each resource:

