

Performance indices of a small company Intranet

The intranet of a small company, with $N = 100$ employees, is composed by three servers: the mail server, the file server, and the Intranet applications server. Their average service times are respectively: $D_m = 50ms$, $D_f = 150ms$ and $D_a = 25ms$. The three stations are also characterized by the following visits: $v_m = 0.7$, $v_f = 0.2$ and $v_a = 1$. Knowing that the think time of the users is $Z = 10\text{ s}$,

Compute:

1. The demand of the three station
2. The system throughput
3. The system response time