

CS3205 Assignment 2 - Slotted ALOHA - Report

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Figures 1 and 2 show the variation of Utilization and Average Packet Delay, for different values of Packet Generation Rates (p) and Initial Collision Window Sizes (w). The constant parameters used are Number of Nodes (n) = 50 and Maximum Number of Packets (m) = 4000. We observe that

- The Initial Collision Window Size seems to have little impact on Utilization and Average Packet Delay. This is because they are influential only for the first few time steps.
- As Packet Generation Rate increases, the Average Packet Delay seems to increase asymptotically.
- As Packet Generation Rate increases, Utilization tends to increase mildly.

Utilisation vs Packet Generation Rate (p)

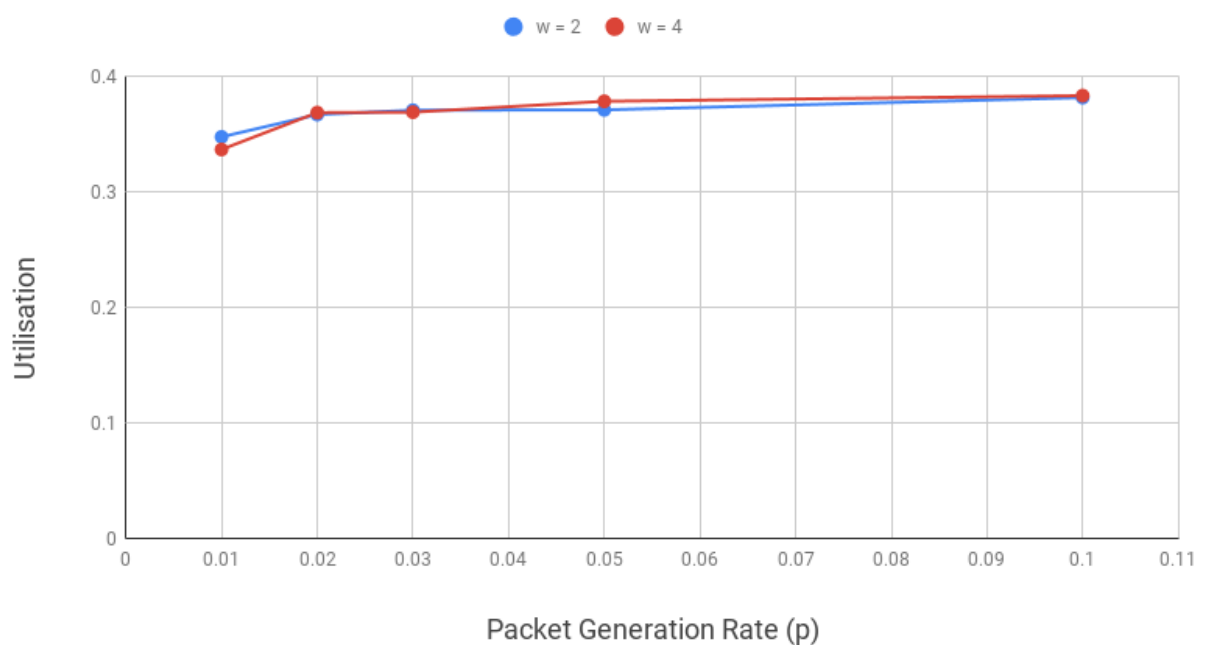


Figure 1: $n = 50, m = 4000$

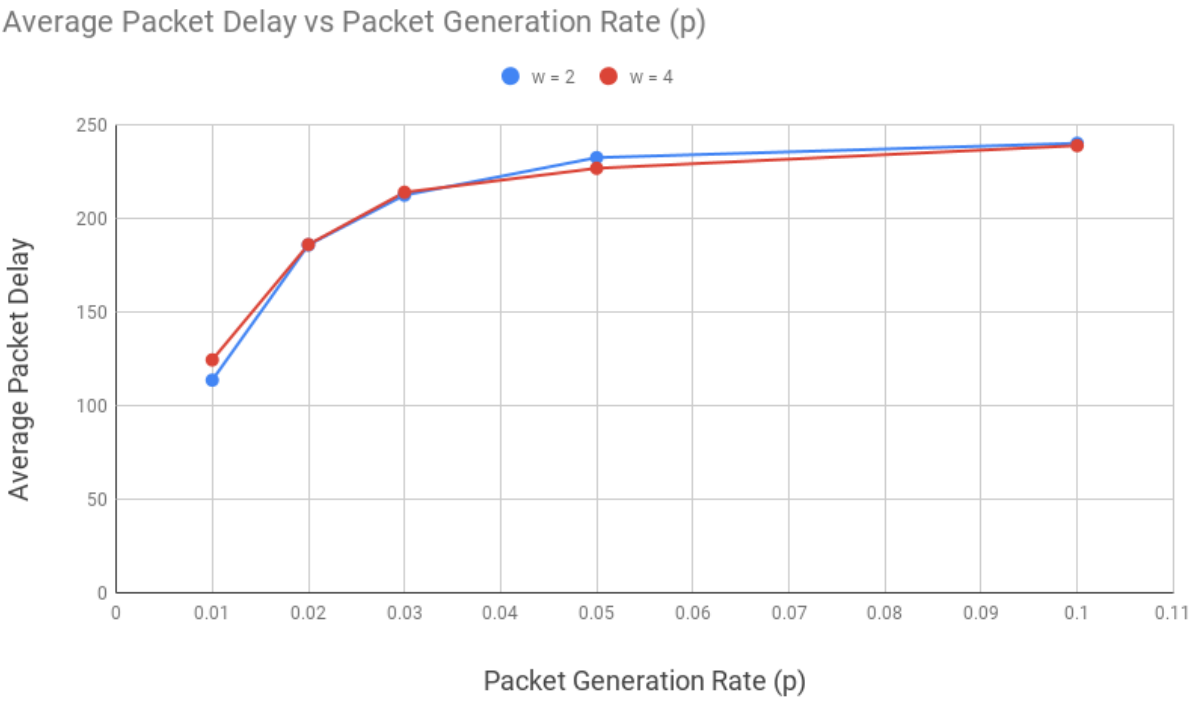


Figure 2: $n = 50, m = 4000$