

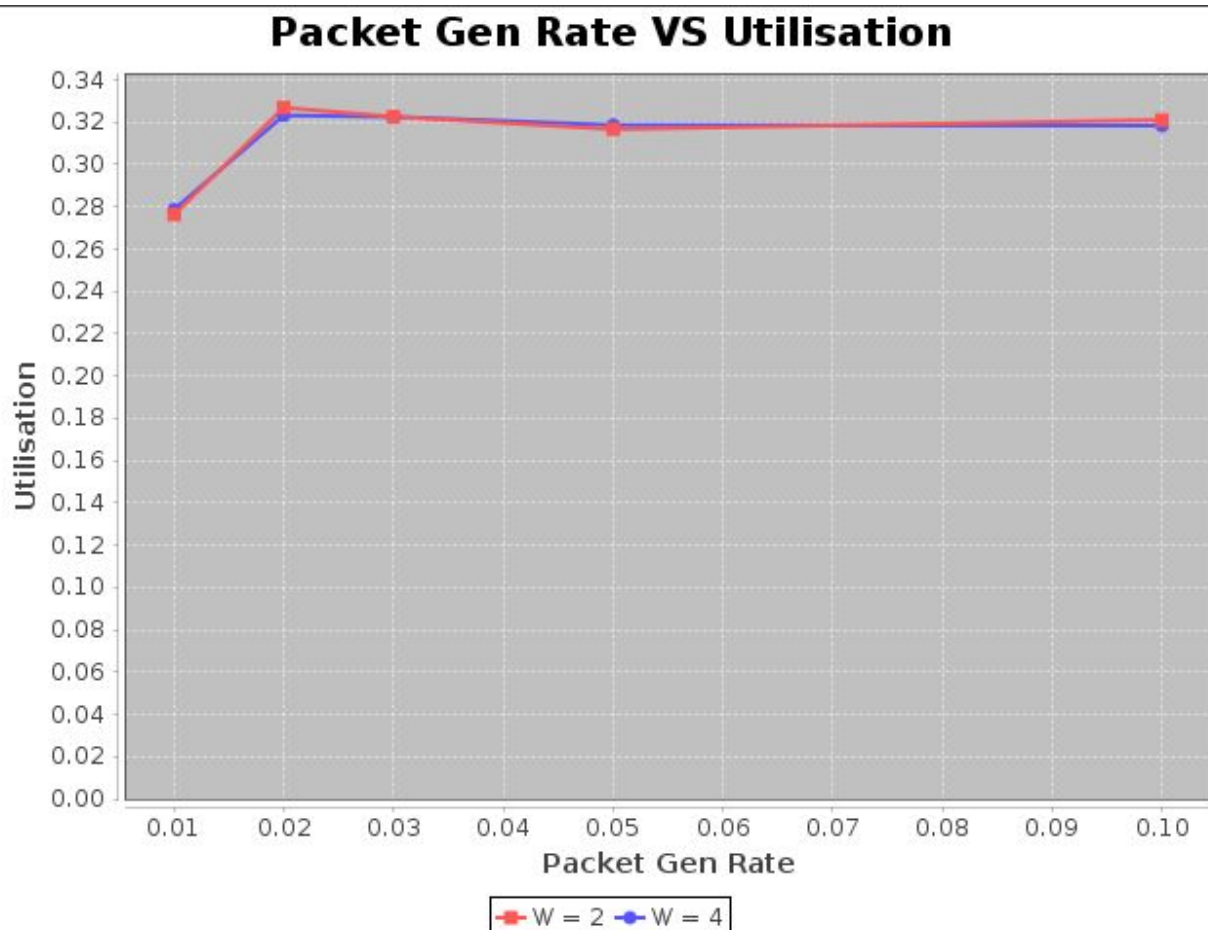
Networks Lab 8

Slotted Aloha Protocol

As Packet Gen Rate increases, the chance of collisions increase and hence the Mean Packet Delay increases.

Utilisation peaks when $N \cdot p = 1$.

Here $N = 50$ and we obtained a peak for $p = 0.02$



Number Of Nodes : 50

Window Size = 2

Packet Gen Rate	Utilisation	Mean Packet Delay (slots)
0.01	0.2761874179842675	27.278
0.02	0.3267968315609692	38.058299999999999
0.03	0.3225190659414469	51.600100000000005
0.05	0.3165828275940286	63.997399999999999
0.1	0.32099417902954813	74.194899999999998

Window Size = 4

Packet Gen Rate	Utilisation	Mean Packet Delay (slots)
0.01	0.2785778061262027	25.788999999999998
0.02	0.32315117248882474	38.4689
0.03	0.3224603550374032	48.6511
0.05	0.31855903895058885	63.800800000000001
0.1	0.31831836577271333	73.088200000000001