CS349: Networks Lab

Assignment 4

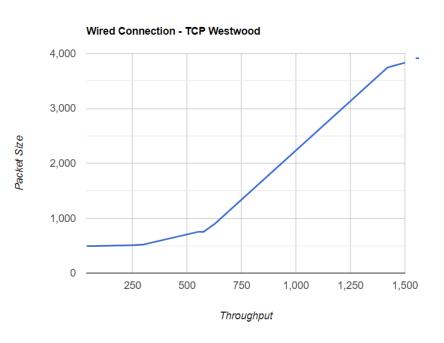
Ashish Agarwal – 170123011

Manan Gupta - 170121035

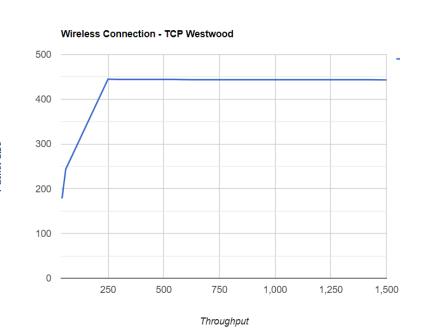
Mriganka Basu Roy Chowdhury – 170123038

TCP Westwood

Wired Connection		
Packet Size	Throughput	Fairness
(Bytes)	(Kbps)	
40	491.4327	1
44	491.4069	1
48	491.4327	1
52	491.4327	1
60	491.4327	1
250	508.1961	1
300	519.3701	1
552	751.6511	1
576	750.516	1
628	899.4531	1
1420	3742.101	1
1500	3831.121	1

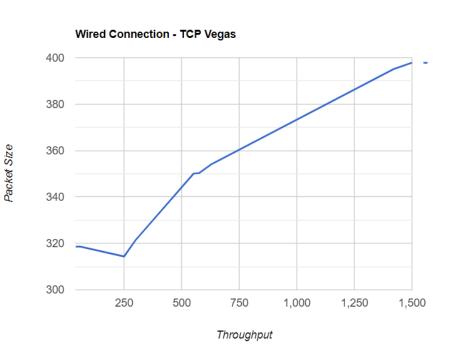


Wireless Connection		
Packet Size	Throughput	Fairness
(Bytes)	(Kbps)	
40	179.74	1
44	180.39	1
48	196.22	1
52	212.19	1
60	243.62	1
250	444.83	1
300	444.23	1
552	444.3	1
576	443.99	1
628	443.6	1
1420	443.65	1
1500	443.23	1

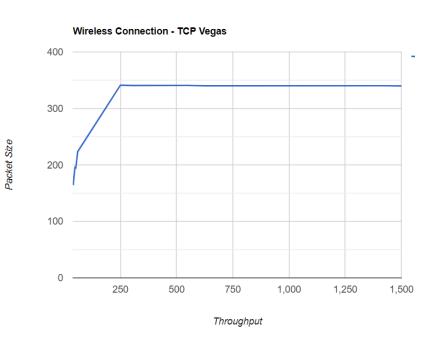


TCP Vegas

Wired Connection		
Packet Size	Throughput	Fairness
(Bytes)	(Kbps)	
40	318.614	1
44	318.5969	1
48	318.614	1
52	318.614	1
60	318.614	1
250	314.3734	1
300	321.4339	1
552	350.1002	1
576	350.2955	1
628	354.0659	1
1420	395.0955	1
1500	397.8657	1

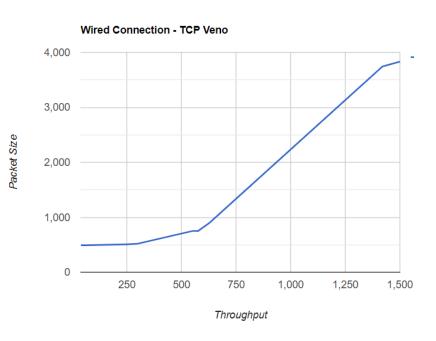


Wireless Connection		
Packet Size	Throughput	Fairness
(Bytes)	(Kbps)	
40	164.07	1
44	180	1
48	195.79	1
52	194.94	1
60	223.56	1
250	341.16	1
300	340.69	1
552	340.75	1
576	340.5	1
628	340.2	1
1420	340.24	1
1500	339.91	1

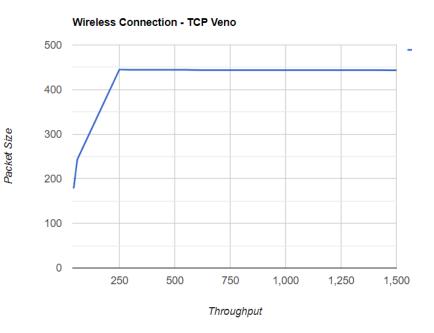


TCP Veno

Wired Connection		
Packet Size	Throughput	Fairness
(Bytes)	(Kbps)	
40	491.4327	1
44	491.4069	1
48	491.4327	1
52	491.4327	1
60	491.4327	1
250	508.1961	1
300	519.3701	1
552	751.6511	1
576	750.516	1
628	899.4531	1
1420	3742.101	1
1500	3831.121	1



Wireless Connection		
Packet Size	Throughput	Fairness
(Bytes)	(Kbps)	
40	179.74	1
44	180.39	1
48	196.22	1
52	212.19	1
60	243.62	1
250	444.83	1
300	444.23	1
552	444.3	1
576	443.99	1
628	443.6	1
1420	443.65	1
1500	443.23	1



Observations:

- In general throughput increases with packet size for wired as well as wireless connection for all TCP variants.
- TCP Veno and TCP Westwood have almost similar throughput while throughput of TCP Vegas is significantly lower.
- Since there is only one connection throughout the experiment the Jain's fairness index is always 1.