

Maximum Forwarding Rate Report

April 12, 2006
15:46:59

Device Tested:
AP Model:
AP SW Version:
WLAN Switch Model:
WLAN Switch Version:



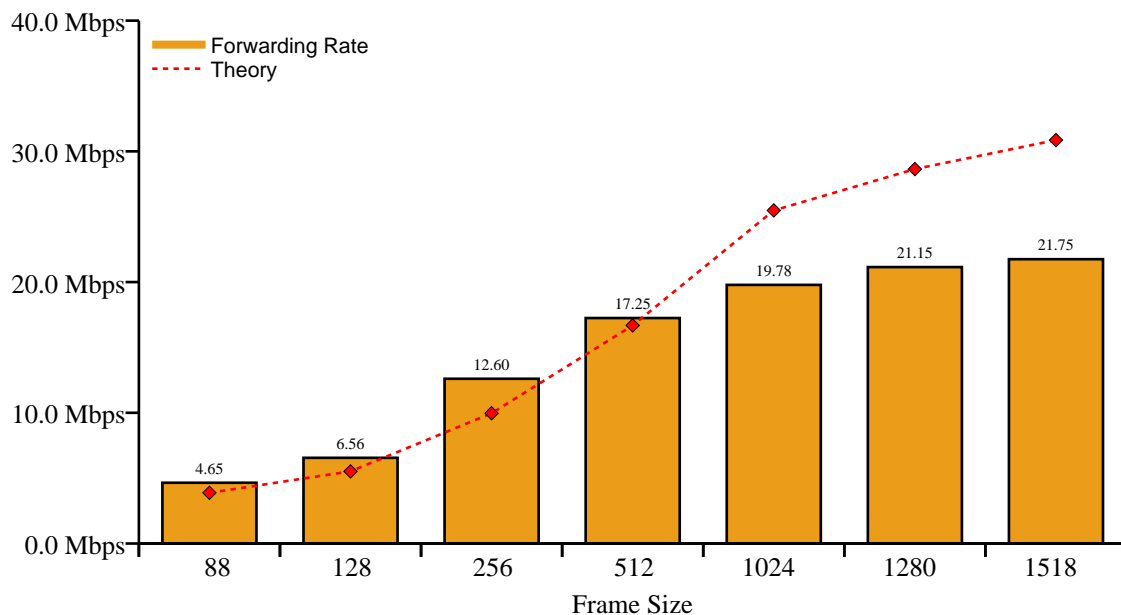
Overview

Maximum forwarding rate is the highest amount of traffic that can be put through the system regardless of packet loss or offered load. Maximum forwarding rate only measures the systems ability to forwarding packets.

By Frame Size

Higher Maximum forwarding rates are desired. The closer the measure value is to theoretical value, the better the performance. Maximum forwarding rate is useful in comparing against throughput rate. Throughput is the highest with no lost data. Maximum forwarding rate shows how much farther a system can go with some lost data.

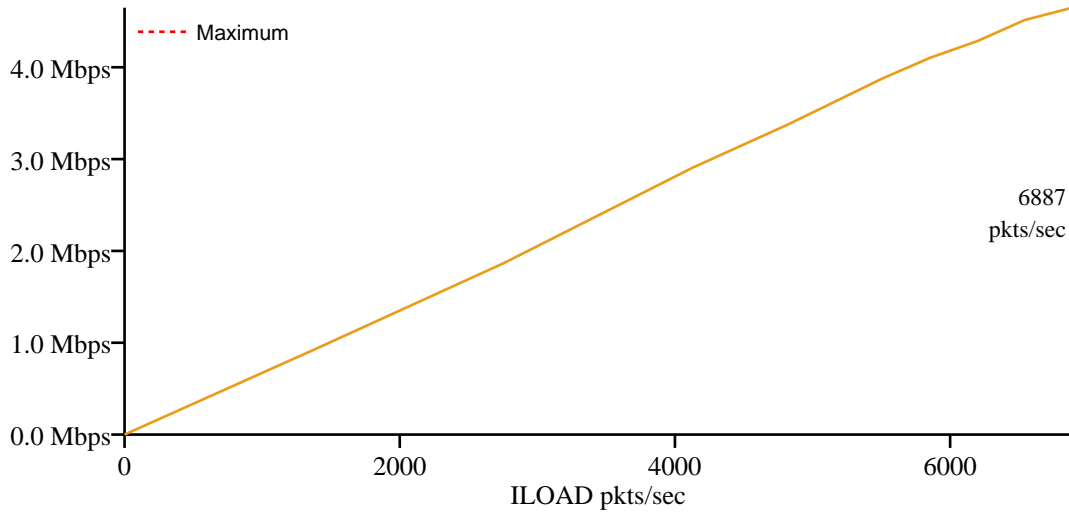
Maximum Forwarding Rate



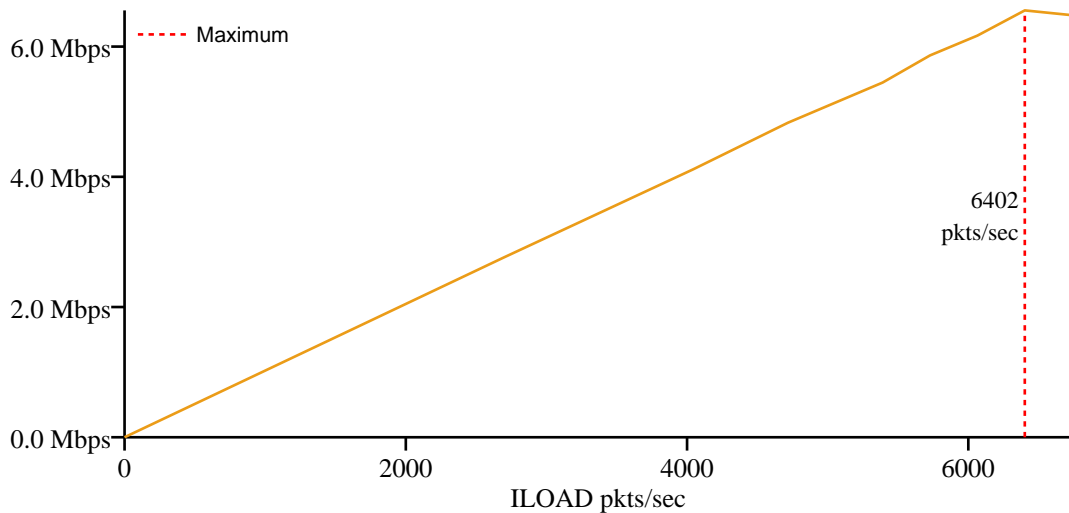
Forwarding Profile

The point where Maximum forwarding rates is achieved is not always at the maximum offered load. By graphing the offered load versus forwarding rate, the system ability to handle loads is revealed. Starting at zero, forwarding rate increases linearly with the offered load. At some point, the change is not linear due to the system adjusting to the offered load. The forwarding rate may increase, decrease, or hold at a constant rate as the offered load approached its maximum.

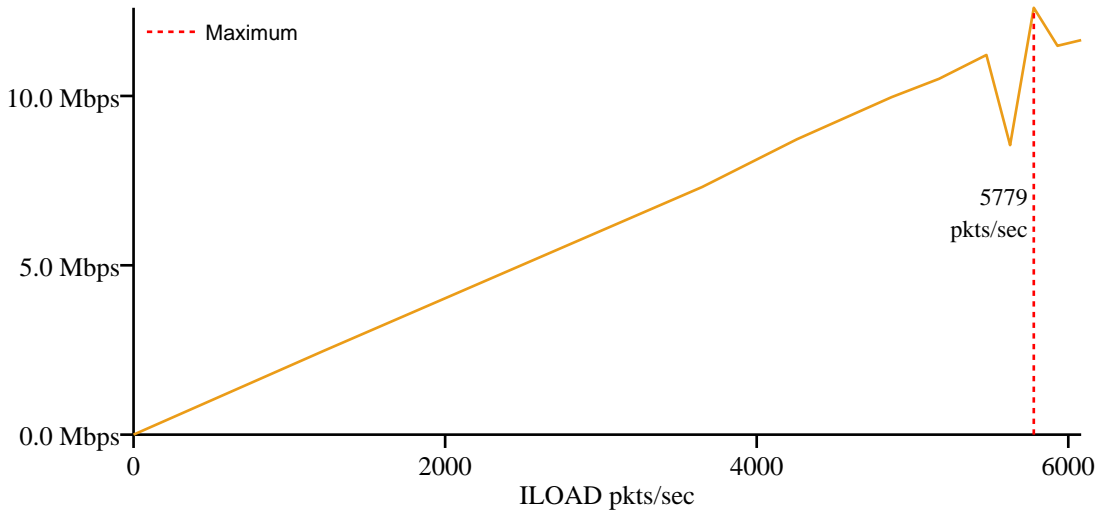
Maximum Forwarding Rate for Size:88 Trial:1



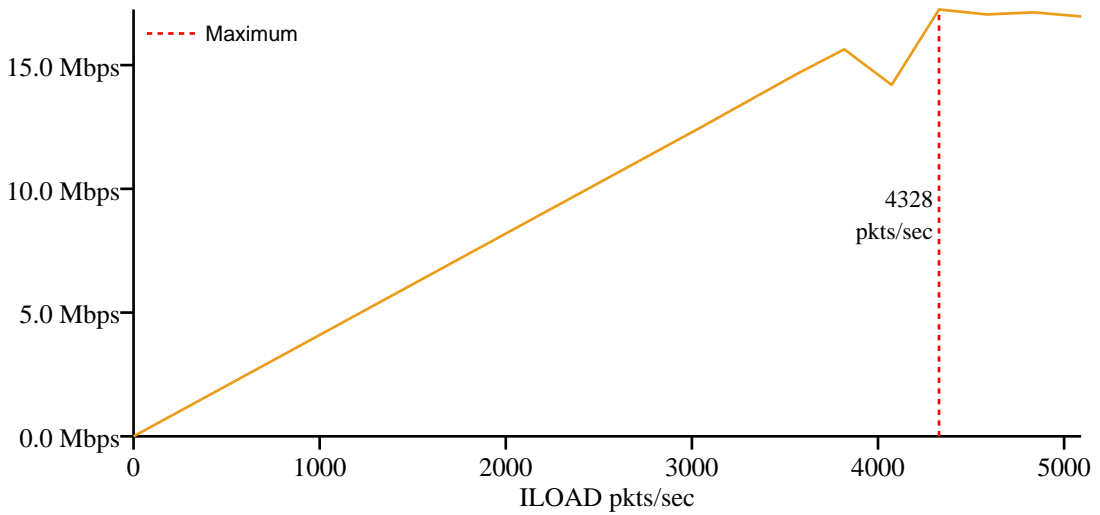
Maximum Forwarding Rate for Size:128 Trial:1



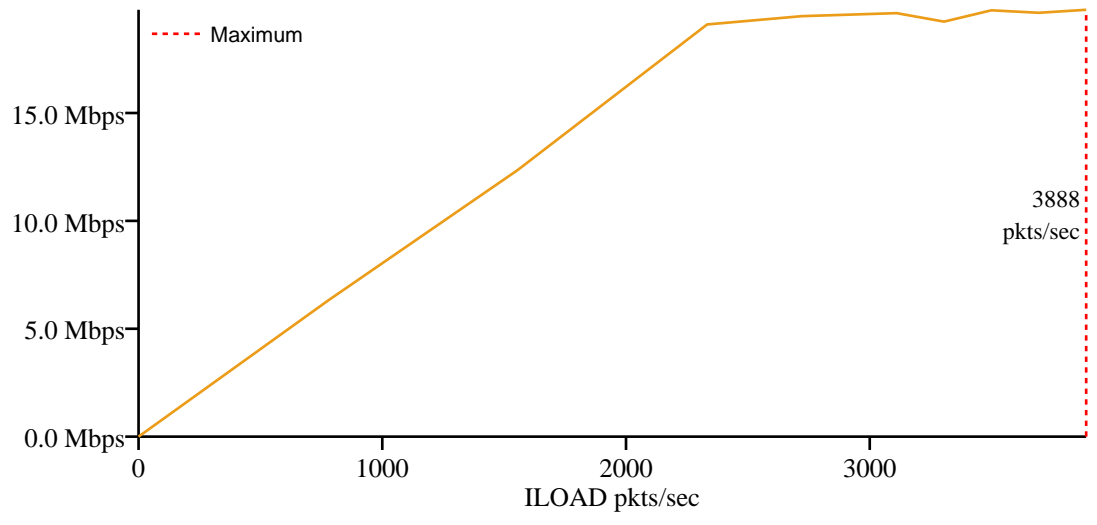
Maximum Forwarding Rate for Size:256 Trial:1



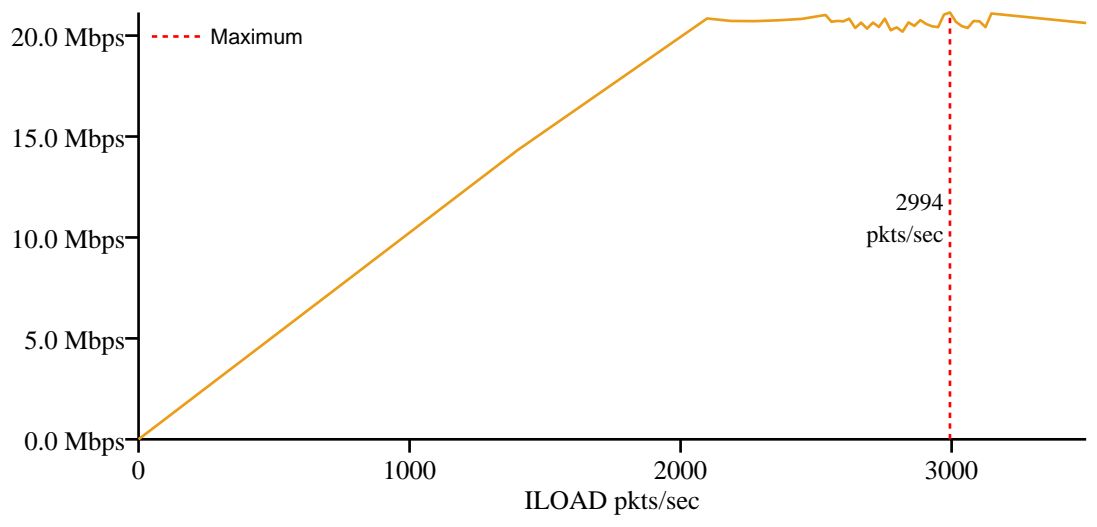
Maximum Forwarding Rate for Size:512 Trial:1



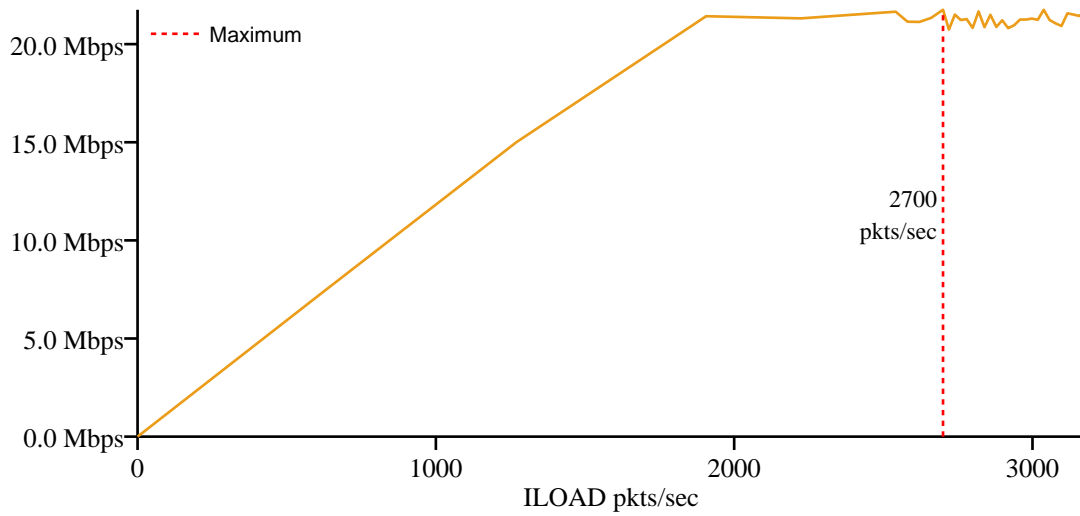
Maximum Forwarding Rate for Size:1024 Trial:1



Maximum Forwarding Rate for Size:1280 Trial:1



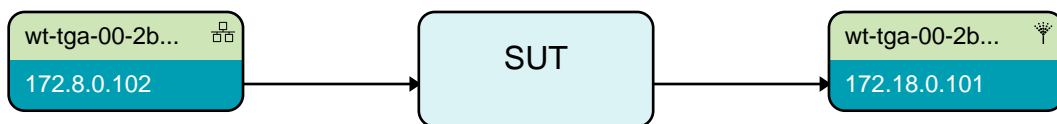
Maximum Forwarding Rate for Size:1518 Trial:1



Test Configuration

Parameter	Value	Description
Learning Time	2.0 secs	The number of seconds to transmit frames for the DUT/SUT to populate its forwarding tables
Transmit Time	5.0 secs	The number of seconds that the WaveTest will transmit for each iteration.
Trials	1	Number of times the measurement will be repeated. Multiple trials are used for averaging the measurement.

Client Map



Methodology

The Max Forwarding Rate(MFR) test identifies the maximum rate at which the system under test (SUT) can forward packets regardless of loss. The test determines the MFR by using a modified binarysearch algorithm.

Detailed Results

Frame Size	Trial	Theoretical pkts/sec	Theoretical bits/sec	ILOAD pkts/sec	OLOAD pkts/sec	Forwarding Rate pkts/sec	Forwarding Rate bits/sec
88	1	5509.6	3878787.9	0	0	0	0
88	1	5509.6	3878787.9	1377.4	1311	1314	925056
88	1	5509.6	3878787.9	2754.8	2755	2651	1866304
88	1	5509.6	3878787.9	4132.2	4132	4132	2908928
88	1	5509.6	3878787.9	4820.9	4799	4796	3376384
88	1	5509.6	3878787.9	5509.6	5509	5510	3879040
88	1	5509.6	3878787.9	5854.0	5830	5828	4102912
88	1	5509.6	3878787.9	6198.3	6136	6087	4285248
88	1	5509.6	3878787.9	6542.7	6409	6413	4514752
88	1	5509.6	3878787.9	6887.1	6886	6603	4648512
128	1	5390.8	5520215.6	0	0	0	0
128	1	5390.8	5520215.6	1347.7	1347	1347	1379328
128	1	5390.8	5520215.6	2695.4	2695	2695	2759680
128	1	5390.8	5520215.6	4043.1	3996	4018	4114432
128	1	5390.8	5520215.6	4717.0	4756	4717	4830208
128	1	5390.8	5520215.6	5390.8	5316	5320	5447680
128	1	5390.8	5520215.6	5727.8	5727	5727	5864448
128	1	5390.8	5520215.6	6064.7	6031	6024	6168576
128	1	5390.8	5520215.6	6401.6	6401	6402	6555648
128	1	5390.8	5520215.6	6738.5	6632	6330	6481920
256	1	4866.2	9965936.7	0	0	0	0
256	1	4866.2	9965936.7	1216.5	1201	1204	2465792
256	1	4866.2	9965936.7	2433.1	2384	2387	4888576
256	1	4866.2	9965936.7	3649.6	3566	3570	7311360
256	1	4866.2	9965936.7	4257.9	4258	4258	8720384
256	1	4866.2	9965936.7	4866.2	4750	4866	9965568
256	1	4866.2	9965936.7	5170.3	5127	5130	10506240
256	1	4866.2	9965936.7	5474.5	5474	5474	11210752
256	1	4866.2	9965936.7	5626.5	5626	4174	8548352
256	1	4866.2	9965936.7	5778.6	5717	6154	12603392
256	1	4866.2	9965936.7	5930.7	5843	5606	11481088
256	1	4866.2	9965936.7	6082.7	6082	5688	11649024
512	1	4073.3	16684317.7	0	0	0	0
512	1	4073.3	16684317.7	1018.3	1018	1018	4169728

Frame Size	Trial	Theoretical pkts/sec	Theoretical bits/sec	ILOAD pkts/sec	OLOAD pkts/sec	Forwarding Rate pkts/sec	Forwarding Rate bits/sec
512	1	4073.3	16684317.7	2036.7	2036	2037	8343552
512	1	4073.3	16684317.7	3055.0	3042	3055	12513280
512	1	4073.3	16684317.7	3564.2	3589	3575	14643200
512	1	4073.3	16684317.7	3818.7	3818	3818	15638528
512	1	4073.3	16684317.7	4073.3	4022	3467	14200832
512	1	4073.3	16684317.7	4327.9	4327	4211	17248256
512	1	4073.3	16684317.7	4582.5	4554	4162	17047552
512	1	4073.3	16684317.7	4837.1	4837	4182	17129472
512	1	4073.3	16684317.7	5091.6	5015	4142	16965632
1024	1	3110.4	25480559.9	0	0	0	0
1024	1	3110.4	25480559.9	777.6	778	770	6307840
1024	1	3110.4	25480559.9	1555.2	1506	1508	12353536
1024	1	3110.4	25480559.9	2332.8	2262	2332	19103744
1024	1	3110.4	25480559.9	2721.6	2695	2379	19488768
1024	1	3110.4	25480559.9	3110.4	3110	2396	19628032
1024	1	3110.4	25480559.9	3304.8	3266	2348	19234816
1024	1	3110.4	25480559.9	3499.2	3499	2412	19759104
1024	1	3110.4	25480559.9	3693.6	3635	2398	19644416
1024	1	3110.4	25480559.9	3888.0	3887	2415	19783680
1280	1	2797.2	28643356.6	0	0	0	0
1280	1	2797.2	28643356.6	699.3	699	699	7157760
1280	1	2797.2	28643356.6	1398.6	1398	1399	14325760
1280	1	2797.2	28643356.6	2097.9	2097	2036	20848640
1280	1	2797.2	28643356.6	2185.3	2185	2024	20725760
1280	1	2797.2	28643356.6	2272.7	2265	2023	20715520
1280	1	2797.2	28643356.6	2360.1	2360	2027	20756480
1280	1	2797.2	28643356.6	2447.6	2462	2034	20828160
1280	1	2797.2	28643356.6	2535.0	2535	2053	21022720
1280	1	2797.2	28643356.6	2556.8	2556	2020	20684800
1280	1	2797.2	28643356.6	2578.7	2578	2024	20725760
1280	1	2797.2	28643356.6	2600.5	2600	2022	20705280
1280	1	2797.2	28643356.6	2622.4	2622	2035	20838400
1280	1	2797.2	28643356.6	2644.2	2618	1990	20377600
1280	1	2797.2	28643356.6	2666.1	2666	2016	20643840
1280	1	2797.2	28643356.6	2687.9	2662	1987	20346880

Frame Size	Trial	Theoretical pkts/sec	Theoretical bits/sec	ILOAD pkts/sec	OLOAD pkts/sec	Forwarding Rate pkts/sec	Forwarding Rate bits/sec
1280	1	2797.2	28643356.6	2709.8	2687	2016	20643840
1280	1	2797.2	28643356.6	2731.6	2703	1995	20428800
1280	1	2797.2	28643356.6	2753.5	2753	2035	20838400
1280	1	2797.2	28643356.6	2775.3	2746	1979	20264960
1280	1	2797.2	28643356.6	2797.2	2731	1993	20408320
1280	1	2797.2	28643356.6	2819.1	2755	1972	20193280
1280	1	2797.2	28643356.6	2840.9	2814	2017	20654080
1280	1	2797.2	28643356.6	2862.8	2862	2000	20480000
1280	1	2797.2	28643356.6	2884.6	2858	2028	20766720
1280	1	2797.2	28643356.6	2906.5	2906	2009	20572160
1280	1	2797.2	28643356.6	2928.3	2897	1998	20459520
1280	1	2797.2	28643356.6	2950.2	2950	1994	20418560
1280	1	2797.2	28643356.6	2972.0	2972	2055	21043200
1280	1	2797.2	28643356.6	2993.9	2948	2065	21145600
1280	1	2797.2	28643356.6	3015.7	2984	2020	20684800
1280	1	2797.2	28643356.6	3037.6	3006	1999	20469760
1280	1	2797.2	28643356.6	3059.4	3018	1990	20377600
1280	1	2797.2	28643356.6	3081.3	3048	2024	20725760
1280	1	2797.2	28643356.6	3103.1	3085	2022	20705280
1280	1	2797.2	28643356.6	3125.0	3107	1994	20418560
1280	1	2797.2	28643356.6	3146.9	3129	2060	21094400
1280	1	2797.2	28643356.6	3496.5	3442	2014	20623360
1518	1	2541.3	30861499.4	0	0	0	0
1518	1	2541.3	30861499.4	635.3	617	620	7529280
1518	1	2541.3	30861499.4	1270.6	1234	1236	15009984
1518	1	2541.3	30861499.4	1906.0	1851	1764	21422016
1518	1	2541.3	30861499.4	2223.6	2204	1755	21312720
1518	1	2541.3	30861499.4	2541.3	2541	1783	21652752
1518	1	2541.3	30861499.4	2581.0	2526	1741	21142704
1518	1	2541.3	30861499.4	2620.7	2620	1740	21130560
1518	1	2541.3	30861499.4	2660.4	2660	1757	21337008
1518	1	2541.3	30861499.4	2700.1	2682	1791	21749904
1518	1	2541.3	30861499.4	2720.0	2720	1708	20741952
1518	1	2541.3	30861499.4	2739.8	2739	1771	21507024
1518	1	2541.3	30861499.4	2759.7	2759	1748	21227712

Frame Size	Trial	Theoretical pkts/sec	Theoretical bits/sec	ILOAD pkts/sec	OLOAD pkts/sec	Forwarding Rate pkts/sec	Forwarding Rate bits/sec
1518	1	2541.3	30861499.4	2779.5	2779	1752	21276288
1518	1	2541.3	30861499.4	2799.4	2771	1715	20826960
1518	1	2541.3	30861499.4	2819.3	2819	1784	21664896
1518	1	2541.3	30861499.4	2839.1	2809	1718	20863392
1518	1	2541.3	30861499.4	2859.0	2858	1770	21494880
1518	1	2541.3	30861499.4	2878.8	2849	1719	20875536
1518	1	2541.3	30861499.4	2898.7	2872	1747	21215568
1518	1	2541.3	30861499.4	2918.5	2853	1714	20814816
1518	1	2541.3	30861499.4	2938.4	2938	1726	20960544
1518	1	2541.3	30861499.4	2958.2	2958	1750	21252000
1518	1	2541.3	30861499.4	2978.1	2947	1750	21252000
1518	1	2541.3	30861499.4	2997.9	2998	1754	21300576
1518	1	2541.3	30861499.4	3017.8	2971	1749	21239856
1518	1	2541.3	30861499.4	3037.6	3037	1791	21749904
1518	1	2541.3	30861499.4	3057.5	3026	1748	21227712
1518	1	2541.3	30861499.4	3077.4	3046	1734	21057696
1518	1	2541.3	30861499.4	3097.2	3042	1723	20924112
1518	1	2541.3	30861499.4	3117.1	3086	1776	21567744
1518	1	2541.3	30861499.4	3136.9	3105	1771	21507024
1518	1	2541.3	30861499.4	3156.8	3109	1765	21434160
1518	1	2541.3	30861499.4	3176.6	3176	1784	21664896

Other Info

Results Directory D:/marketing\20060412-153645
WaveApps Version 1.1.0
WaveTest Version 2.1.0