
General Simulation Information

Num Servers Per TOR:	4	Num Sender Hosts:	28	Load Factor:	%0.0
Num TORs:	8	Num Receiver Hosts:	1	Start Time:	0s
Server Link Speed:	10Gb/s	Workload Type:	FACEBOOK	Stop Time:	9.5s
Fabric Link Speed:	40Gb/s	InterArrival Dist:	facebook_scaled	Warmup Time:	0ms
Fabric Link Delay	0.0us	SW Turn-around Time:	0.5us	NIC Send ThinkTime:	0.5us
Edge Link Delay	0.0us	Switch Fix Delay:	0.25us	TransportScheme:	PseudoIdeal

Homa Packets Traffic Rates

Homa Packet Type	AvgRate (Mb/s)	CumRate (Mb/s)	MinRate (Mb/s)	MaxRate (Mb/s)
SX NICs Req. SxRate:	0.00	0.00	0.00	0.00
SX NICs Unsched. SxRate:	179.50	5025.98	173.63	188.93
SX NICs Sched. SxRate:	0.00	0.00	0.00	0.00
RX NICs Grant SxRate:	0.00	0.00	0.00	0.00

Traffic Characteristic (Rates, Bytes, and DutyCycle)

Measurement Point	AvgRate (Gb/s)	CumRate (Gb/s)	MinRate (Gb/s)	MaxRate (Gb/s)	CumBytes (MB)	Avg Duty Cycle(%)	Min Duty Cycle(%)	Max Duty Cycle(%)
SX Apps Send:	0.13	3.62	0.12	0.14	90.58			
SX NICs Send:	0.18	5.03	0.17	0.19	125.65	1.85	1.79	1.95
All NICs Send:	0.16	5.03	0.00	0.19	125.65	1.62	0.00	1.95
TORs Down Recv:	0.16	5.03	0.00	0.19	125.65	1.62	0.00	1.95
TORs Up Send:	0.63	5.03	0.00	0.72	125.65	1.62	0.00	1.87
TORs Up Recv:	0.63	5.03	0.00	5.03	125.65	1.62	0.00	12.97
TORs Down Send:	0.16	5.03	0.00	5.03	125.65	1.62	0.00	51.86
ALL NICs Recv:	0.16	5.03	0.00	5.03	125.65	1.62	0.00	51.86
RX NICs Recv:	5.03	5.03	5.03	5.03	125.65	51.86	51.86	51.86
RX Apps Recv:	3.62	3.62	3.62	3.62	90.58			

Queue Length (Stats Collected At Pkt Arrivals)

Queue Location	Mean (Pkts)	StdDev (Pkts)	Mean (KB)	StdDev (KB)	Empty %	OnePkt %	Min (Pkts)	Min (KB)	Max (Pkts)	Max (KB)
SX Transports	1.00	0.00	0.18	0.44	nan	nan	1.00	0.00	1.00	46.40
SX NICs	0.07	0.43	0.07	0.57	95.45	3.53	0.00	0.00	32.00	47.46
All NICs	0.07	0.43	0.07	0.57	95.44	3.53	0.00	0.00	32.00	47.46
SX TORs Up	0.03	0.18	0.01	0.10	97.07	2.75	0.00	0.00	4.00	2.57
All TORs Up	0.03	0.18	0.01	0.10	97.07	2.75	0.00	0.00	4.00	2.57
RX TORs Down	1.29	1.74	0.55	1.23	44.47	24.43	0.00	0.00	23.00	24.75
All TORs Down	1.29	1.74	0.55	1.23	44.48	24.43	0.00	0.00	23.00	24.75

Queue Wait Time Stats

Packet Type: Request

Queue Location	mean (us)	mean (%)	stddev (us)	min (us)	median (us)	75%ile (us)	99%ile (us)	max (us)	count
Host NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
TORs upward NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Aggr Switch NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
TORs downward NICs:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Total:	0.00	0.00							

Packet Type: Unsched. Data

Queue Location	mean (us)	mean (%)	stddev (us)	min (us)	median (us)	75%ile (us)	99%ile (us)	max (us)	count
Host NICs:	0.06	16.38	0.45	0.00	0.00	0.00	1.03	40.97	500971
TORs upward NICs:	0.00	0.77	0.02	0.00	0.00	0.00	0.11	0.53	500971
Aggr Switch NICs:	0.01	2.50	0.03	0.00	0.00	0.00	0.20	1.30	500971
TORs downward NICs:	0.27	80.35	0.88	0.00	0.00	0.00	2.52	52.32	500971
Total	0.34	100.00							

Packet Type: Grant

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Queue Location      mean      mean      stddev   min      median   75%ile   99%ile   max      count
                   (us)      (%)      (us)     (us)     (us)     (us)     (us)     (us)     (us)
-----
Host NICs:          0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs upward NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
Aggr Switch NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs downward NICs: 0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
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Total:              0.00      0.00
    
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Packet Type: Sched. Data

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Queue Location      mean      mean      stddev   min      median   75%ile   99%ile   max      count
                   (us)      (%)      (us)     (us)     (us)     (us)     (us)     (us)     (us)
-----
Host NICs:          0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs upward NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
Aggr Switch NICs:  0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
TORs downward NICs: 0.00      0.00      0.00     0.00     0.00     0.00     0.00     0.00     0
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Total                0.00      0.00
    
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packet Type: All Pkts

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Queue Location      mean      mean      stddev   min      median   75%ile   99%ile   max      count
                   (us)      (%)      (us)     (us)     (us)     (us)     (us)     (us)     (us)
-----
SX Host NICs:       0.06      16.38     0.45     0.00     0.00     0.00     1.03     40.97     500999
SX TORs UP NICs:   0.00      0.77      0.02     0.00     0.00     0.00     0.11     0.53     500978
Aggr Switch NICs:  0.01      2.50      -nan     0.00     0.00     0.00     0.20     1.30     500979
RX TORs Down NICs: 0.27      80.35     0.88     0.00     0.00     0.00     2.52     52.32     500972
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Total                0.34      100.00
    
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|End To End Message Latency For Different Ranges of Message Sizes|

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Msg Size Range      mean      stddev   min      median   75%ile   99%ile   max      count      count
                   (us)      (us)     (us)     (us)     (us)     (us)     (us)     (us)     (%)
-----
(0, 5]              2.56      0.28     2.38     2.38     2.38     3.27     7.00     149428     30.53
(5, 10]             2.57      0.30     2.39     2.39     2.48     3.40     5.16     11631      2.38
(10, 15]            2.59      0.30     2.40     2.40     2.55     3.65     5.47     70212     14.35
(15, 100]           2.67      0.32     2.41     2.41     2.67     3.82     5.73     80151     16.38
(100, 1448]         3.26      0.70     2.55     2.98     2.98     5.37     13.61     169735     34.68
(1448, 10000]       7.82      3.20     4.78     5.37     8.06     18.80     46.74     8170      1.67
(10000, 100000]    32.13     15.19     14.63     26.02     32.52     97.57     97.57     76         0.02
(100000, Huge]     0.00      0.00     0.00     0.00     0.00     0.00     0.00     0          0.00
    
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|Total Queue Delay (ie. real_e2e_latency - ideal_e2e_latency) For Different Ranges of Message Sizes|

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Msg Size Range      mean      stddev   min      median   75%ile   99%ile   max      count      count
                   (us)      (us)     (us)     (us)     (us)     (us)     (us)     (us)     (%)
-----
(0, 5]              0.17      0.28     0.00     0.00     0.00     0.92     4.62     149428     30.53
(5, 10]             0.19      0.30     0.01     0.01     0.15     1.20     2.78     11631      2.38
(10, 15]            0.20      0.30     0.02     0.02     0.21     1.23     3.09     70212     14.35
(15, 100]           0.22      0.32     0.03     0.03     0.22     1.34     3.34     80151     16.38
(100, 1448]         0.30      0.48     0.03     0.03     0.31     1.87     9.50     169735     34.68
(1448, 10000]       2.28      2.61     0.02     0.02     2.03     12.20     35.65     8170      1.67
(10000, 100000]    16.07     10.87     2.75     10.87     18.11     54.34     54.34     76         0.02
(100000, Huge]     0.00      0.00     0.00     0.00     0.00     0.00     0.00     0          0.00
    
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