

IxNetwork Report

Test: RFC2544 - Throughput/Latency

Test Date: 08/02/2017 20:49:43

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RFC2544 - Throughput/Latency - Info

Test Information

Product Information

Product Label : Your switch/router name here
Product Version : Your firmware version here

Serial Number: Your switch/router serial number here

Comments:

Test Settings

Date Executed : 08/02/2017
Time Executed : 20:49:43

User Name:

Number of Trials Executed: 1
Stream Duration (sec): 20

Output Parameters

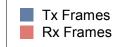
Number of Trials Passed : N/A
Test Duration : 00:03:15

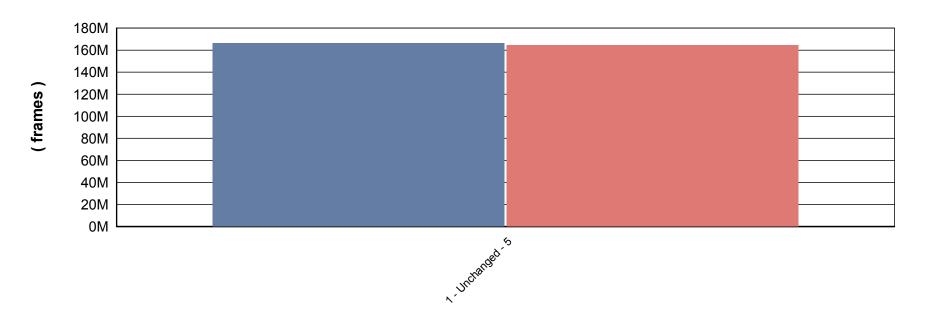
RFC2544 - Throughput/Latency - Port Map Information

Port Map:	Tx Port	Tx Speed (Mbps)	Rx Port	Rx Speed (Mbps)	
	172.16.0.9:2:1	10000	172.16.0.9:2:2	10000	

RFC2544 - Throughput/Latency - Aggregated Graph

Total Frames Transmitted and Received



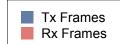


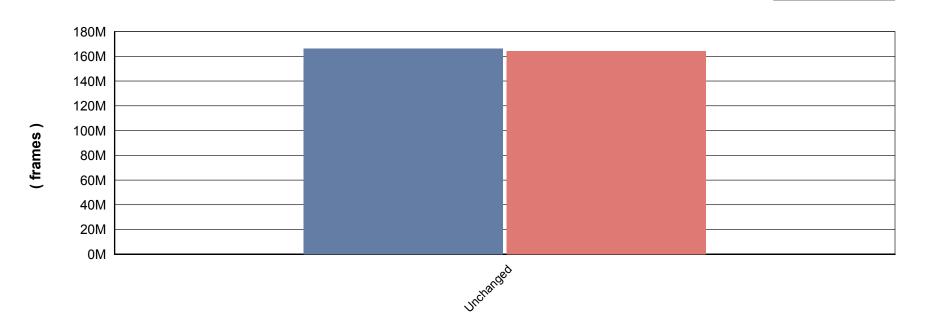
Trial - Framesize - Iteration

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RFC2544 - Throughput/Latency - Aggregated Graph

Tx / Rx Frames per Frame Size



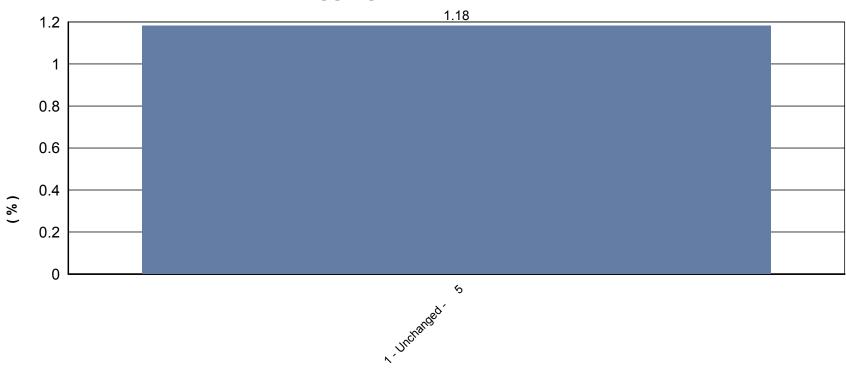


Frame Size

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RFC2544 - Throughput/Latency - Aggregated Graph

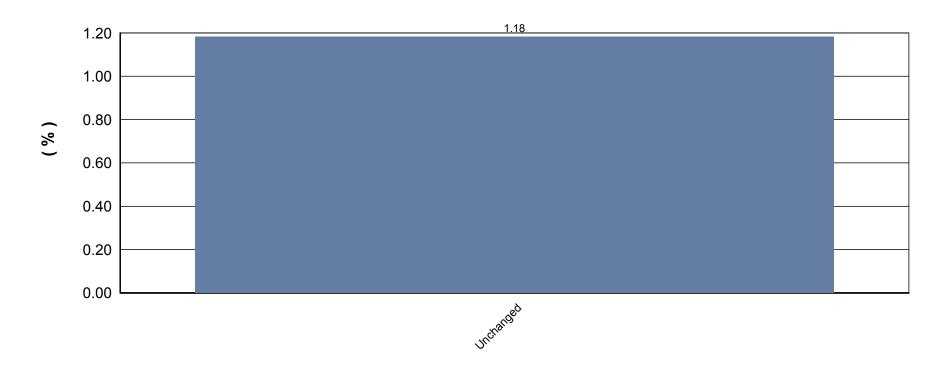
Aggregated Frame Loss



Trial - Framesize - Iteration

RFC2544 - Throughput/Latency - Aggregated Graph

Aggregated Frame Loss per Frame Size

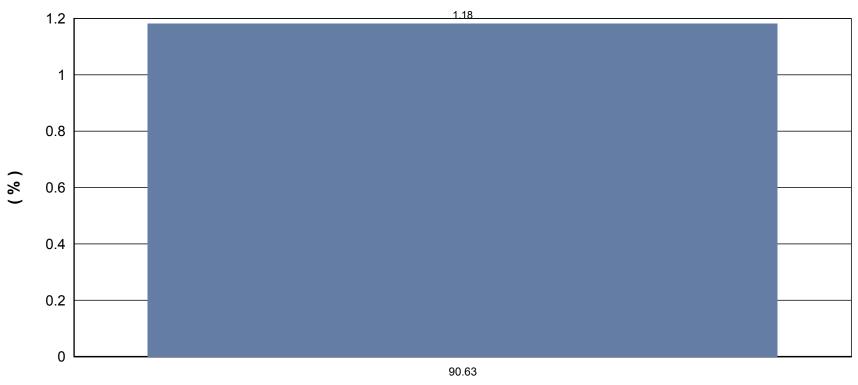


Frame Size

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RFC2544 - Throughput/Latency - Aggregated Graph

Aggregated Frame Loss per Line Rate

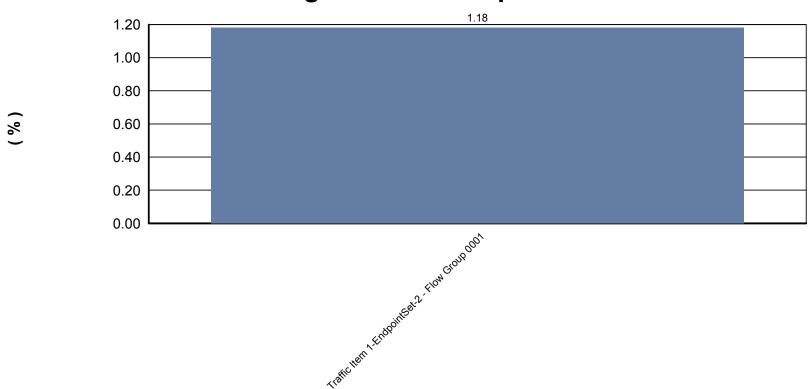


Line Rate (%)

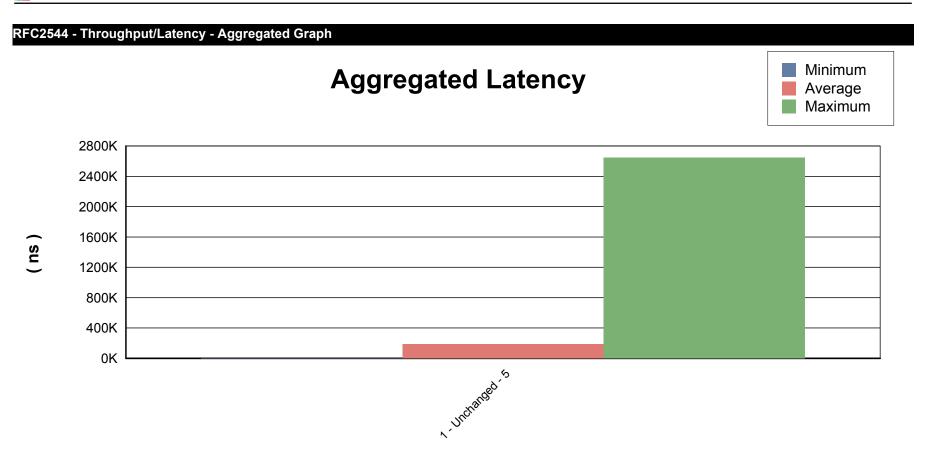
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RFC2544 - Throughput/Latency - Per Flow Graph

Average Frame Loss per Flow



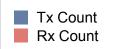
Flow

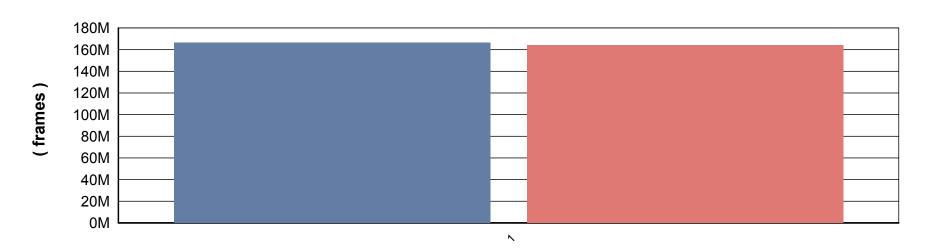


Trial - Framesize - Iteration

RFC2544 - Throughput/Latency - Per Flow Graph

Tx / Rx Frame Count



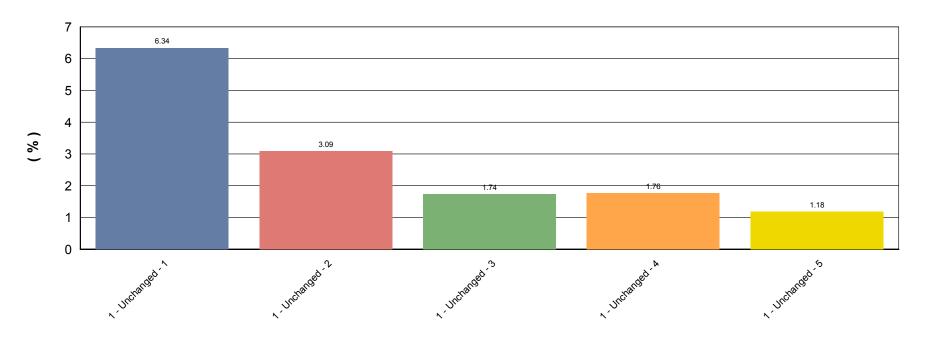


Trial

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RFC2544 - Throughput/Latency - Iteration Graph

Aggregated Frame Loss (%)

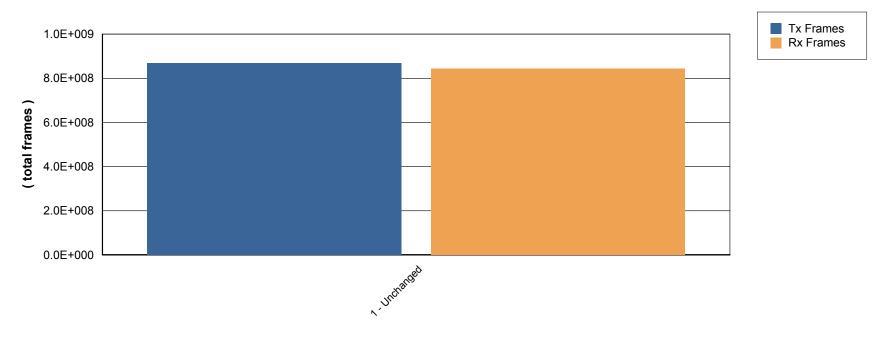


Trial - Frame Size - Iteration

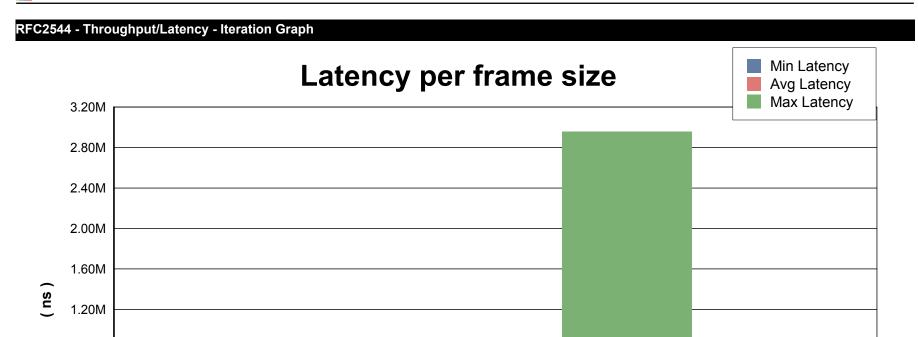
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RFC2544 - Throughput/Latency - Iteration Graph

Tx / Rx Frames per Frame Size



Trial - Frame Size



_ Unchanged

0.80M

0.40M

0.00M

Trial - Frame Size

RFC2544 - Throughput/Latency - Aggregated Results

Iter: 5

Trial / Framesize / Iteration		. Agg	g L2 Throughput		Agg L1 T	hroughput	Through	nput (frames)	· A	Agg Latend	cy
mary ramosize / noralest	AggTx		Agg Rx Rat		Tx Rate	Rx Rate			Min	Max	Average
	Rate %	%	FPS	Mbps	Mbps	Mbps			(ns)	(ns)	(ns)
Trial: 1 / FS: Unchanged /	90.63	89	8083689.5	7648 807			Ty ·	166226194 000	6647	264590	0 185118.000

Tx : 166226194.000 Rx : 164261284.000 Loss : 1964910 Loss% : 1.18

RFC2544 - Throughput/Latency - Per Flow Statistics - Part 1 of 2

Trial / Framesize /	Tx Port	Rx Port	Flow Group		L2	Throughput		L1 Thro	oughput	Throu	ughput (frames)
Iteration				Tx Rate %	%	Rx Rate FPS	Mbps	Tx Rate Mbps	Rx Rate Mbps		
Trial: 1 / FS: Unchanged / Iter: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	90.63	89	8083689.5	7648.81			Tx : Rx : Loss : Loss% :	166226194 164261284 1964910 1.182

RFC2544 - Throughput/Latency - Per Flow Statistics - Part 2 of 2

Trial / Framesize / Iteration	Tx Port	Rx Port	Flow Group	Min Latency (ns)	Max Latency (ns)	Avg Latency (ns)	
Trial: 1 / FS: Unchanged / Iter: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	6647	2645900	185118	

RFC2544 - Throughput/Latency - Iteration Statistics - Part 1 of 2 L2 Throughput L1 Throughput Trial / Framesize / Tx Port Rx Port Flow Group Throughput (frames) Iteration Rx Rate Tx Rate Rx Rate Rate % FPS Mbps Mbps Mbps Trial: 1 / FS: Unchanged / Ethernet - Ethernet -Traffic Item 1-EndpointSet-2 -Tx 181937237 100.00 92.42 8443152.4 7891.23 Rx 170405562 Iter: 1 001 002 Flow Group 0001 11531675 Loss Loss% 6.338 Trial: 1 / FS: Unchanged / Ethernet -Traffic Item 1-EndpointSet-2 -Tx 178804901 Ethernet -95.00 91.67 8310136.4 7837.28 Rx 173284532 Iter: 2 001 002 Flow Group 0001 5520369 Loss Loss% 3.087 Trial: 1 / FS: Unchanged / Ethernet -Ethernet -Traffic Item 1-EndpointSet-2 -Tx 174243072 8204017.4 7756.85 92.50 90.70

8091731.9

8083689.5

7653.32

7648.81

91.25 89.48

90.63 89.42

Rx

Tx

Rx

Tx

Rx

Loss

Loss%

Loss Loss%

Loss

Loss%

171214891

3028181

167645073

164693549

166226194

164261284

1964910

1.182

2951524

1.761

1.738

RFC2544 - Throughput/Latency - Iteration Statistics - Part 2 of 2

002

Ethernet -

Ethernet -

002

002

Flow Group 0001

Traffic Item 1-EndpointSet-2 -

Flow Group 0001

Traffic Item 1-EndpointSet-2 -

Flow Group 0001

001

Ethernet -

001

Ethernet -

001

Iter: 3

Trial: 1 / FS: Unchanged /

Iter: 4

Trial: 1 / FS: Unchanged /

Iter: 5

Trial / Framesize / Iteration	Tx Port	Rx Port	Flow Group	Min Latency (ns)	Max Latency (ns)	Avg Latency (ns)
Trial: 1 / FS: Unchanged / Iter: 1	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	10365	2631420	490714.00
Trial: 1 / FS: Unchanged / Iter: 2	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	7025	2958762	273337.00
Trial: 1 / FS: Unchanged / Iter: 3	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	6640	2700970	217065.00
Trial: 1 / FS: Unchanged / Iter: 4	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	6847	2778367	209062.00
Trial: 1 / FS: Unchanged / Iter: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	6647	2645900	185118.00



Theoretical maximum Frame Rates (frames/second) for different frame sizes (bytes)

Speed	64	128	256	512	1024	1280	1518
10 Mbps	14881	8446	4529	2350	1198	962	813
100 Mbps	148810	84460	45290	23497	11973	9616	8128
1000 Mbps	1488096	844595	452899	234963	119732	96154	81275
10 Gbps	14880952	8445946	4528986	2349625	1197318	961539	812744
25 Gbps	37202380	21114864	11322463	5874060	2993295	2403846	2031859
40 Gbps	59523809	33783783	18115942	9398496	4789272	3846153	3250975
100 Gbps	148809523	84459459	45289855	23496240	11973180	9615384	8127438
155 Mbps (Oc - 3)	288000	145116	72840	36491	18263	14614	12324
622 Mbps (Oc - 12)	1152000	580465	291362	145965	73054	58454	49296
2488 Mbps (Oc - 48)	4608000	2321860	1165447	583860	292215	233817	197182
9952 Mbps (Oc - 192)	18432000	9287442	4661790	2335439	1168859	935270	788730