

# **IxNetwork Report**

Test: RFC2544 - Throughput/Latency

Test Date: 08/02/2017 19:45:33

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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 : 19:45:33

User Name :

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

**Output Parameters** 

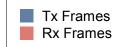
Number of Trials Passed : N/A
Test Duration : 00:03:14

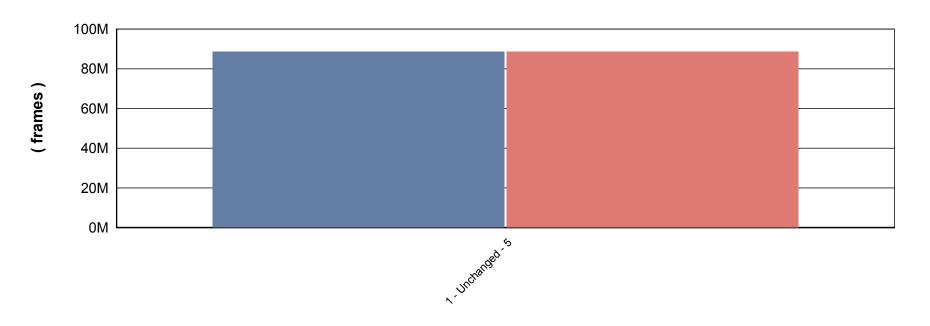
### RFC2544 - Throughput/Latency - Port Map Information

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**



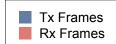


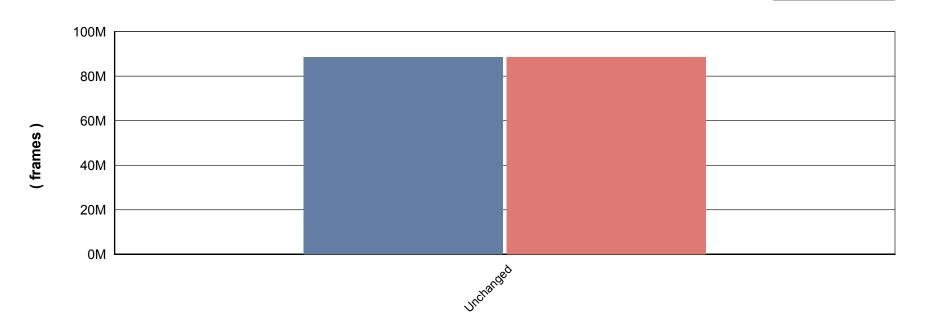
Trial - Framesize - Iteration

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## RFC2544 - Throughput/Latency - Aggregated Graph

# Tx / Rx Frames per Frame Size



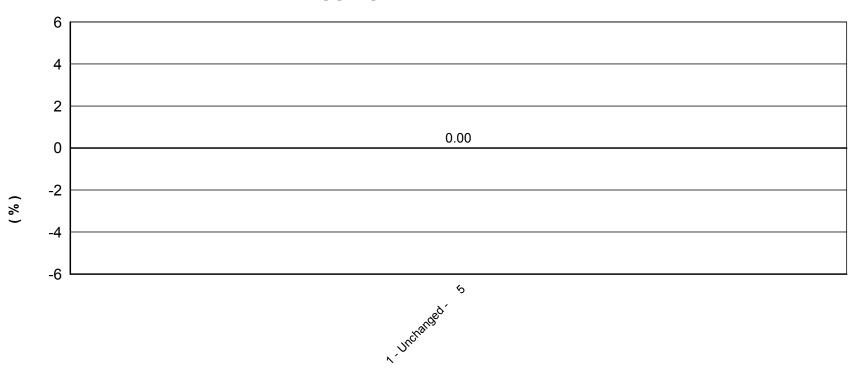


Frame Size

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### RFC2544 - Throughput/Latency - Aggregated Graph

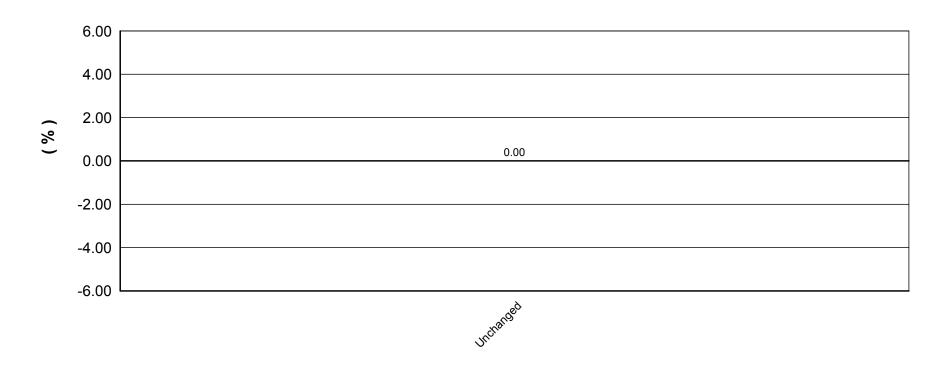
# **Aggregated Frame Loss**



Trial - Framesize - Iteration

### RFC2544 - Throughput/Latency - Aggregated Graph

# **Aggregated Frame Loss per Frame Size**

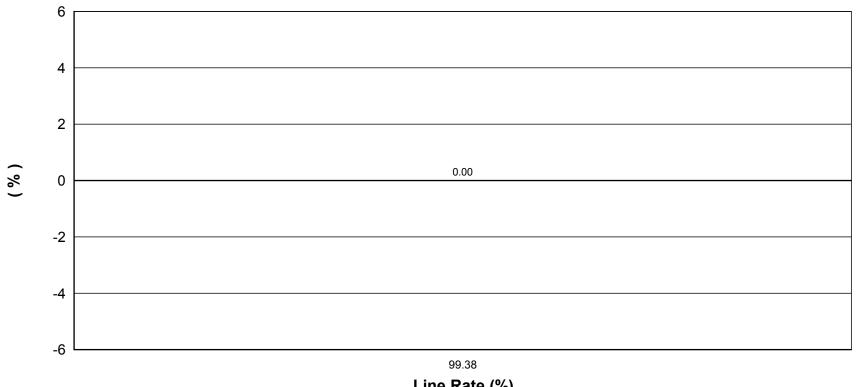


Frame Size

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### RFC2544 - Throughput/Latency - Aggregated Graph

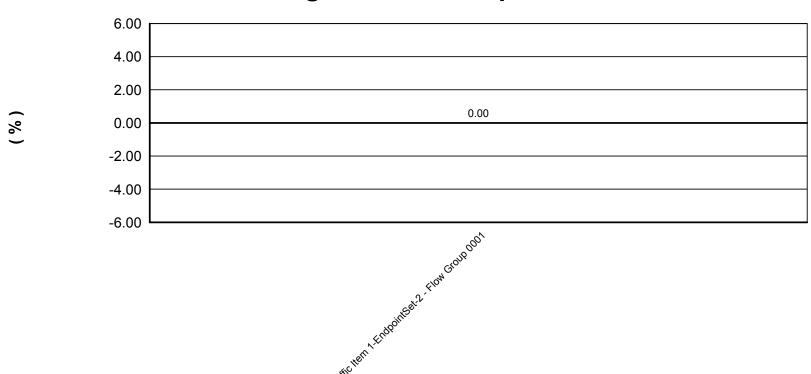
# **Aggregated Frame Loss per Line Rate**



Line Rate (%)

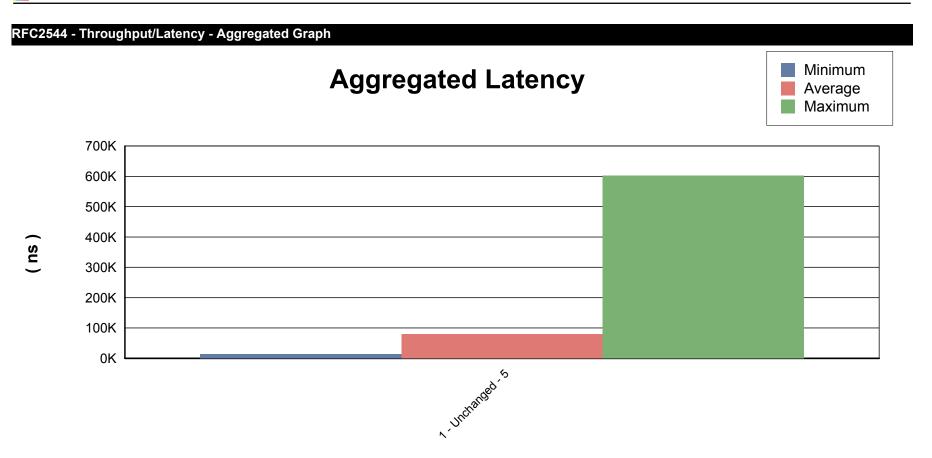
#### RFC2544 - Throughput/Latency - Per Flow Graph

# **Average Frame Loss per Flow**



Flow

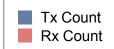
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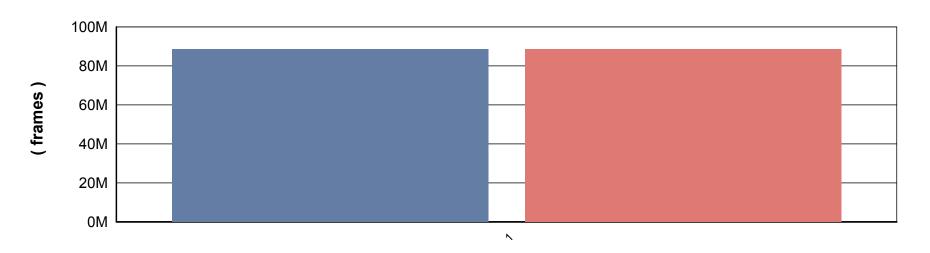


Trial - Framesize - Iteration

### RFC2544 - Throughput/Latency - Per Flow Graph

# Tx / Rx Frame Count



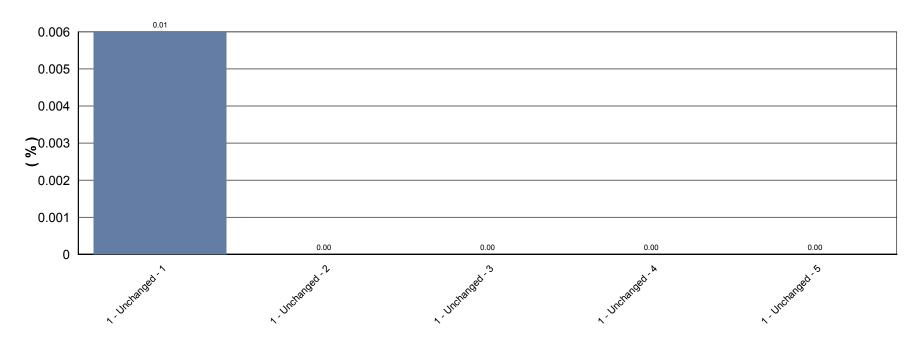


Trial

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### RFC2544 - Throughput/Latency - Iteration Graph

# Aggregated Frame Loss (%)

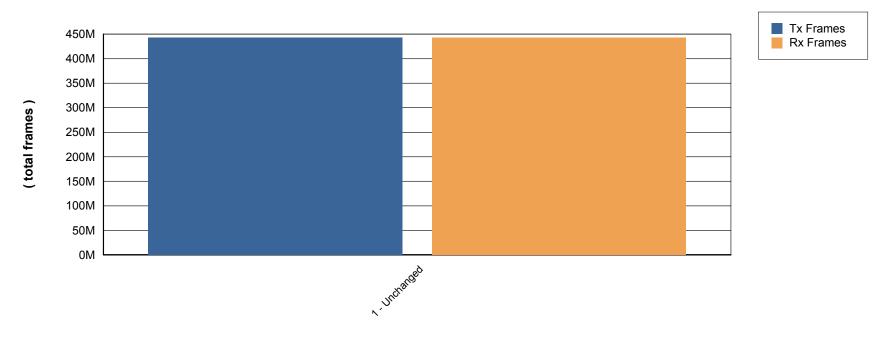


**Trial - Frame Size - Iteration** 

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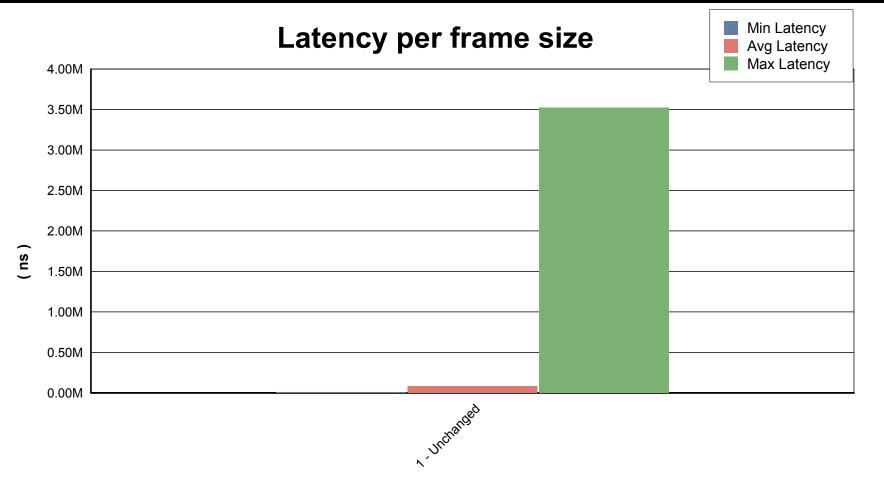
### RFC2544 - Throughput/Latency - Iteration Graph

# Tx / Rx Frames per Frame Size



**Trial - Frame Size** 





**Trial - Frame Size** 

# RFC2544 - Throughput/Latency - Aggregated Results

Trial / Framesize / Iteration	Agg L2 Throughput				Agg L1 Throughput			hroug	hput (frames)	Agg Latency		
a.,	AggTx		Agg Rx Rat	е	Tx Rate	Rx Rate				Min	Max	Average
	Rate %	%	FPS	Mbps	Mbps	Mbps				(ns)	(ns)	(ns)
Trial: 1 / FS: Unchanged /	99.38	99	4352450.5	9238.243			Tx	:	88526888.000	13537	602017	80379.000
Iter: 5							Rx	:	88526888.000			

Rx : 88526888.000 Loss : 0 Loss% : 0.00

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

Trial / Framesize /	Tx Port	Rx Port	Flow Group		L2	Throughput		L1 Thro	oughput	Th	roughpu	(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	99.38	99	4352450.5	9238.24			Tx Rx Loss Loss%	:	88526888 88526888 0 0.000

### 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	13537	602017	80379	

#### 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 88760413 100.00 99.91 4374969.9 9291.05 88755355 Rx Iter: 1 001 002 Flow Group 0001 Loss 5058 Loss% 0.006 Trial: 1 / FS: Unchanged / Ethernet -Traffic Item 1-EndpointSet-2 -Tx 86765572 Ethernet -95.00 95.00 4160818.1 8836.13 86765572 Rx Iter: 2 001 002 Flow Group 0001 Loss 0 Loss% 0.000 Ethernet -Trial: 1 / FS: Unchanged / Ethernet -Traffic Item 1-EndpointSet-2 -Tx 89110131 97.50 97.50 4270329.0 9066.93 Iter: 3 Rx 89110131 001 002 Flow Group 0001 Loss Loss% 0.000 Trial: 1 / FS: Unchanged / Ethernet -Ethernet -Traffic Item 1-EndpointSet-2 -4325067.5 Tx 90334449 98.75 98.75 9180.69

4352450.5

9238.24

99.38 99.38

Rx

Tx

Rx

Loss

Loss%

Loss Loss% 90334449

88526888

88526888

0.000

0.000

0

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

002

Ethernet -

002

Flow Group 0001

Traffic Item 1-EndpointSet-2 -

Flow Group 0001

001

Ethernet -

001

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	14367	3522397	120541.00	
Trial: 1 / FS: Unchanged / Iter: 2	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	11555	397897	68508.00	
Trial: 1 / FS: Unchanged / Iter: 3	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	12587	443500	72382.00	
Trial: 1 / FS: Unchanged / Iter: 4	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	12792	1324865	76549.00	
Trial: 1 / FS: Unchanged / Iter: 5	Ethernet - 001	Ethernet - 002	Traffic Item 1-EndpointSet-2 - Flow Group 0001	13537	602017	80379.00	



### 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