Packet Blazer 10GigE

Job Information

Job ID	1
Contractor	University of Washington
Customer	shelton-k12
Report Date	2020-07-10 15:36:54
Operator Name	danieldh
Circuit ID	JNet:SHL/WTN/ETH00006239.0

File Name: C:\inetpub\wwwroot\k20_performance_reports\shelton-k12\2020-07-10_shelton-k12.pdf

Comment:

Table of Contents

1. Setup

1.1. IPversion Status

Port	IP Version
Port1	IPv4

1.2. Transceiver Mode

Item	Value
Transceiver Mode	10GigE LAN

2. Summary

2.1. Alarm

2.1.1. Alarms

2.1.1.1. Global

Alarm	H
Global	Fault
Log Full	No Fault

2.1.1.2. Physical

Alarm	H
LOS	No Fault
Frequency	No Fault
LOC	No Fault

Signal Analysis	Value
Pwr (dBm)	-2.6

Frequency Analysis	Value
Freq (bps)	10312534784.0
Offset (ppm)	3

2.1.1.3. WIS

No information is available

2.1.1.4. Ethernet

Alarm	H
Error	Fault
Link	No Fault
Fault	No Fault

2.1.1.5. Higher Layer Protocol

Alarm	H
Error	No Fault

2.1.1.6. Pattern

No information is available

2.1.1.7. Other

Alarm	H
SDT	No Fault

2.1.2. Logger

2.1.2.1. Logger Events

ID	Date/Time	Data Path	Event	Duration	Count	Rate
1	2020-07-10 15:10:46	Test 1	Test Started			
2	2020-07-10 15:11:39	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:05	83	1.62E-05
3	2020-07-10 15:11:45	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:19	581	6.06E-05
4	2020-07-10 15:12:17	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:02	64	4.74E-05
5	2020-07-10 15:14:15	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:01	10	1.48E-05
6	2020-07-10 15:14:26	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:01	28	1.45E-05
7	2020-07-10 15:14:30	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:02	9	1.42E-05
8	2020-07-10 15:14:33	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:03	18	1.43E-05
9	2020-07-10 15:14:37	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:01	24	1.45E-05
10	2020-07-10 15:14:56	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:01	10	1.34E-05
11	2020-07-10 15:15:41	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:01	3	1.11E-05
12	2020-07-10 15:19:12	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:08	175	7.24E-06
13	2020-07-10 15:19:21	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:01	4	7.24E-06
14	2020-07-10 15:19:23	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:04	42	7.47E-06
15	2020-07-10 15:20:40	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:09	165	7.38E-06
16	2020-07-10 15:20:53	Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]	Frame Loss	00:00:02	56	7.64E-06
17	2020-07-10 15:21:34	Test 1	Test Stopped			

2.2. Test

2.2.1. Test Status

Item	Value
Start Time:	2020-07-10 15:10:46
Port 1 Link	Up

2.2.2. Test Configuration

Item	Value
Application Type	EtherSAM (Y.1564)
Test Name	BV10.EtS
Test Description	

2.2.3. Test Preferences

No information is available

2.2.4. Clock Configuration

Item	Value
Clock Mode	Internal

2.2.5. Alarm Analysis

Alarm	H	Seconds
LOC	No Fault	0

2.2.6. Timer Configuration

Item	Value
Start Time Status	Disabled
Start Time	2015-07-20 12:19:45
Stop Time Status	Disabled
Stop Time	2015-07-20 12:19:45
Duration Status	Disabled
Duration	15 minutes
On/Off State	Disabled

3. Optical [P1]/Port

3.1. TX

3.1.1. Signal Analysis

Item	Value
Output Presence	Active

3.1.2. Alarm Generation

Item	Value
Type	LOS
On/Off	Disabled

3.1.3. Frequency

Item	Value
Frequency Offset (ppm)	0
On/Off	Disabled
Actual Frequency (bps)	10312499904
Nominal Frequency (bps)	10312500000

3.2. RX

3.2.1. Signal Analysis

Item	Value
Range (dBm)	-14.0 to 2.0
Power (dBm)	-2.6

3.2.2. Alarm Analysis

Alarm	H	Seconds
LOS	No Fault	0
Frequency	No Fault	0

3.2.3. Frequency Analysis

Item	Value
Frequency (bps)	10312534784
Frequency Offset (bps)	34784
Max. Negative Offset (bps)	0
Max. Positive Offset (bps)	34976

3.3. Interface

3.3.1. Configuration

Item	Value
Flow Control	None

3.3.2. Status

Item	Value
Link	Up

3.4. Network

3.4.1. MAC Configuration

Item	Value
MAC Address	00:03:01:08:9E:3D

3.4.1.1. VLAN

Item	Value
Enable VLAN	Disabled

3.4.2. IP Configuration

Item	Value
IP Address	10.10.114.173
Subnet Mask	255.255.255.0
Enable DHCP	Disabled
Enable Default Gateway	Disabled
Default Gateway	N/A

3.4.3. Frame Format

Item	Value
Format	Ethernet II
OUI	N/A

4. EtherSAM Configuration

4.1. Overview

4.1.1. EtherSAM Configuration Overview

Service	Profile	Enable	Service Name	Frame Size	CIR (Mbps)	Max Jitter (ms)	Max Latency (ms)	Frame Loss (%)	CBS (Bytes)
1	Data	Enabled	2Gb CIR	Random	1900.0	2	28	0.01	N/A
2	Data	Disabled	Service 2	74	5000.0	2	15	0.1	N/A
3	Data	Disabled	Service 3	74	5000.0	2	15	0.1	N/A
4	Data	Disabled	Service 4	74	5000.0	2	15	0.1	N/A
5	Data	Disabled	Service 5	74	5000.0	2	15	0.1	N/A
6	Data	Disabled	Service 6	74	5000.0	2	15	0.1	N/A
7	Data	Disabled	Service 7	74	5000.0	2	15	0.1	N/A
8	Data	Disabled	Service 8	74	5000.0	2	15	0.1	N/A
9	Data	Disabled	Service 9	74	5000.0	2	15	0.1	N/A
10	Data	Disabled	Service 10	74	5000.0	2	15	0.1	N/A

4.1.2. Global Verdict

4.1.3. Enable Sub-Tests

Item	Value
Service Configuration Test	Enabled
Ramp Test	Enabled
Burst Test	Disabled
Service Performance Test	Enabled

4.1.4. Sub-Tests Duration

Item	Duration
Service Configuration Test	00d:00:00:20
Service Performance Test	00d:00:10:00

4.1.5. Total TX Rate (%)

Item	Value
Available	81.0
Committed	19.0

4.2. Services

4.2.1. 2Gb CIR

4.2.1.1. SLA Parameters

Item	Value
CIR (Mbit/s)	1900.0
CIR+EIR (Mbit/s)	N/A
Traffic Policing (Mbit/s)	N/A
CBS (Bytes)	N/A
EBS (Bytes)	N/A
Burst Max Rate (Mbit/s)	N/A
Max Jitter (ms)	2
Max Latency (ms)	28
Frame Loss (%)	0.01

4.2.1.2. Frame Configuration

4.2.1.2.1. Service Profile

Item	Value
Profile Type	Data

4.2.1.2.2. Frame Configuration

Item	Value	Size
Data Link	Ethernet II	Random
Network	IPv4	Random
Transport	UDP	Random

4.2.1.3. MAC

4.2.1.3.1. Source

Item	Value
MAC Address	00:03:01:08:9E:3D

4.2.1.3.2. Destination

Item	Value
MAC Address	00:03:01:F8:29:B2
Resolve MAC Address	Enabled
Status	Resolved

4.2.1.3.2.1. VLAN

Item	Value
Enable VLAN	Disabled

4.2.1.3.3. Frame Format

Item	Value
Format	Ethernet II
OUI	N/A
User Defined OUI	N/A
EtherType	0800

4.2.1.4. MPLS Configuration

Item	Value
Label #2	N/A
COS / EXP #2	N/A
TTL #2	N/A

4.2.1.5. IP

4.2.1.5.1. Source

Item	Value
IP Address	10.112.0.01
Subnet Mask	255.255.255.0

4.2.1.5.1.1. IP Multiplicator

Item	Value
Enable	Disabled
Range	N/A

4.2.1.5.2. Destination

Item	Value
IP Address	10.112.0.100
TTL	128
IP TOS/DS	00

4.2.1.5.2.1. Advanced TOS/DS

Item	Value
Enable Differentiated Services	Disabled

4.2.1.5.2.1.1. DS

No information is available

4.2.1.5.2.1.2. TOS

Item	Value
Precedence	000 (Routine)
Delay	Normal
Throughput	Normal
Reliability	Normal
Monetary Cost	Normal
Reserved Bit	0

4.2.1.5.2.2. Default Gateway

Item	Value
Enable	Disabled
Default Gateway	N/A

4.2.1.6. UDP

4.2.1.6.1. Source

Item	Value
Port	49184

4.2.1.6.2. Destination

Item	Value
Port	7

4.2.1.7. Payload

No information is available

4.3. Ramp

Step List	Value (% of CIR)
Step Time (s)	5
Ramp Duration (s)	25

Step1 (%)	50.0
Step2 (%)	75.0
Step3 (%)	90.0
Step4	CIR
Step5	Traffic Policing

4.4. Burst

Item	Value
Number of Burst Sequence	2
Refill Delay Ratio (%)	50
Burst/IR Frame Ratio (%)	90

4.4.1. Burst Test

Service No.	CBS Test Time (s)	EBS Test Time (s)	Total Burst Test Time (s)
1	N/A	N/A	--
2	N/A	N/A	--
3	N/A	N/A	--
4	N/A	N/A	--
5	N/A	N/A	--
6	N/A	N/A	--
7	N/A	N/A	--
8	N/A	N/A	--
9	N/A	N/A	--
10	N/A	N/A	--
Total	0	0	0

5. EtherSAM Results

5.1. Overview

5.1.1. Global Progress

Item	Value
Test Status	Completed
Verdict	PASS

5.1.2. Configuration Test Overview

5.1.2.1. 2Gb CIR

Item	Value	Verdict
Frame Loss (%)	< 0.001	PASS
Max Jitter (ms)	0.083	PASS
Max Latency (ms)	2.639	PASS
Max RX Rate (Mbit/s)	1899.998	PASS

5.1.3. Performance Test Overview

5.1.3.1. 2Gb CIR

Item	Value	Verdict
Average RX Rate (Mbps)	1899.985	PASS
Frame Loss (%)	< 0.001	PASS
Max Jitter (ms)	0.085	PASS
Max Latency (ms)	2.972	PASS
Verdict	PASS	PASS

5.2. Service Configuration Test

5.2.1. 2Gb CIR

5.2.1.1. Service Verdict

Item	Verdict
Service Verdict	PASS

5.2.1.2. Max RX Rate

Item	Value	Verdict
Max RX Rate (Mbit/s)	1899.998	PASS

5.2.1.3. Step 1

Item	Value	Verdict
Percentage of CIR	50.0	Not Applicable
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.083	PASS
Max Latency (ms)	2.581	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	949.991	N/A

5.2.1.4. Step 2

Item	Value	Verdict
Percentage of CIR	75.0	Not Applicable
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.074	PASS
Max Latency (ms)	2.540	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	1425	N/A

5.2.1.5. Step 3

Item	Value	Verdict
Percentage of CIR	90.0	Not Applicable
Frame Loss (%)	< 0.001	PASS
Max Jitter (ms)	0.080	PASS
Max Latency (ms)	2.591	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	1709.983	N/A

5.2.1.6. Step CIR

Item	Value	Verdict
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.071	PASS
Max Latency (ms)	2.639	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	1899.998	N/A

5.3. Service Performance Test

5.3.1. Port 1

5.3.1.1. 2Gb CIR

5.3.1.1.1. Sequence Tracking

Error	H	Seconds	Count	Rate	Percentage
Out-Of-Sequence	No Fault	0	0	0.00E00	0.000
Frame Loss	Fault	60	1272	7.27E-06	< 0.001

5.3.1.1.2. RX Rate

Item	Value
Minimum (%)	18.986
Maximum (%)	19.001
Current (%)	19
Average (%)	18.999
RX Frame Count	175773744

5.3.1.1.3. Round Trip Latency

Item	Value
Minimum (ms)	2.392
Maximum (ms)	2.972
Current (ms)	2.407
Average (ms)	2.422

5.3.1.1.4. Jitter

Item	Value
Minimum (ms)	< 0.015
Maximum (ms)	0.085
Current (ms)	< 0.015
Average (ms)	< 0.015
Number of Samples	174944802
Estimate (ms)	< 0.015

6. Optical [P1]/Ethernet Framed Layer 2/Traffic Analyzer

6.1. Eth. RX

6.1.1. Configuration

Item	Value
Oversize Monitoring	Disabled

6.1.2. Alarm Analysis

Alarm	H	Seconds
Link Down	No Fault	0
Local Fault	No Fault	0
Remote Fault	No Fault	0

6.1.3. Error Analysis

Error	H	Seconds	Count	Rate
Block	No Fault	0	0	0.00E00
FCS	No Fault	0	0	0.00E00
Jabber/Giant	No Fault	0	0	0.00E00
Oversize	N/A	N/A	N/A	N/A
Runt	No Fault	0	0	0.00E00
Undersize	No Fault	0	0	0.00E00
Total Error Count			0	

6.2. Eth. Stats

6.2.1. Total Frame Counts

	RX Count	TX Count
Total Count	180388027	180388970

6.2.2. Valid Frame Counts

Frames	TX Count	RX Count
Multicast	0	347
Broadcast	11	0
Unicast	180388959	180387680
N-Unicast	11	347
Total	180388970	180388027

6.2.3. Frame Size

Frame Size	Count	Total (%)
< 64	0	0.000
64	127863	0.071
65 - 127	7829714	4.340
128 - 255	15868916	8.797
256 - 511	31722777	17.586
512 - 1023	63460648	35.180
1024 - 1518	61378109	34.026
> 1518	0	0.000

6.2.4. Throughput

Item	Value
Bandwidth (Mbps)	0.000544
Utilization (%)	0.00000704
Frame Rate (fps)	1

6.3. Higher Layers

6.3.1. Higher Layer Protocol

Error	H	Seconds	Count	Rate
IP Header Checksum	No Fault	0	0	0.00E00
UDP Checksum	No Fault	0	0	0.00E00
TCP Checksum	No Fault	0	0	--

7. Clock Synchronization

7.1. RX

7.1.1. Configuration

Item	Value
Interface Type	None
Termination Mode	N/A
Line Coding	N/A
Framing	N/A

7.1.2. Alarm Analysis

Alarm	State
LOS	N/A
AIS	N/A
LOF	N/A
Frequency	N/A

7.1.3. Frequency Analysis

Item	Value
Frequency (bps)	--
Frequency Offset (ppm)	--

7.2. Backplane

7.2.1. Configuration

Item	Value
Clock Mode	Internal
Enable	Disabled

7.2.2. Alarm Analysis

Alarm	State
LOC	No Fault

7.3. Clock Out

7.3.1. Configuration

Item	Value
Clock Out Divider	16

8. Software Options

8.1. Available Options

Category	Name	Description	Status
Feature	SK-ADV-FILTERS	Advanced Traffic Filtering	Enabled
Feature	SK-DATA-CAPTURE	Ethernet Frame Capture for Advanced Troubleshooting	Disabled
Feature	SK-ETHERSAM	Ethernet Service Activation Methodology Application Type	Enabled
Feature	SK-IPV6	Internet Protocol Version 6 (IPv6)	Disabled
Feature	SK-MPLS	Multi Protocol Label Switching	Disabled
Feature	SK-PBB-TE	Provider Backbone Bridge with Traffic Engineering	Disabled
Feature	SK-TRAFFIC-SCAN	Traffic Scan Troubleshooting Feature	Disabled
Network	SK-LAN	Local Area Network	Enabled
Network	SK-WAN	Wide Area Network	Enabled