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L A M P I R A N

Pertanyaan untuk Wawancara dalam penelitian dengan judul Skripsi

"Analisis Perbandingan Routing Statik Dalam Penerapan IPv4 Dan IPv6 Pada SMPN 9 Kaur"

No	Pertanyaan	Jawaban
1	Apa Jenis Layanan jaringan internet yang saat ini digunakan di SMPN 9 Kaur?	WIFI
2	Apakah sekolah memiliki jaringan LAN internal atau hanya mengandalkan wifi dari pihak luar saja ?	Ya Punya. tetapi untuk saat ini tidak digunakan, jika mau digunakan bisa
3	Apakah Jaringan Internet Sekolah Menjangkau Seluruh Ruangan, termasuk Laboraturium Komputer?	Ya
4	Siapa yang mengelola jaringan sekolah, apakah pihak internal (Sekolah) atau eksternal (penyedia layanan seperti PLN atau ISP) ?	PLN
5	Apakah Ibu mengetahui apakah jaringan yang digunakan sekarang memakai IPv4, IPv6, atau keduanya?	Pernah dengar tapi belum mengetahui dan Pastinya
6	Apakah selama ini sekolah pernah menghadapi kendala pada jaringan internet seperti lambat, tidak stabil, atau tidak bisa diakses di beberapa titik sekolah ?	Ya
7	Apakah pernah ada inisiatif atau rencana untuk membangun atau memperluas jaringan lokal sekolah, seperti penggunaan LAN di Laboraturium Komputer?	Ya
8	Seberapa penting peran jaringan internet dalam kegiatan belajar mengajar, khususnya di ruang laboratorium komputer ?	Sangat Penting untuk Proses mengajar
9	Menurut Ibu, apakah sekolah terbuka terhadap pengembangan system jaringan baru secara lokal seperti IPv6 jika hal tersebut memberikan manfaat bagi sekolah ?	Ya
10	Apa harapan ibu terkait dengan pengembangan dan pengelolaan jaringan komputer di SMPN 9 Kaur ke depannya ?	harapan saya kedepan ya jaringan agar dapat Pembelajaran dalam ruang komputer khususnya lebih aktif lagi dari Sebelumnya.

PEMERINTAH KABUPATEN KAUR
DINAS PENDIDIKAN DAB KEBUDAYAAN
SMP NEGERI 9 KAUR
TERAKREDITASI A
Jl. Raya Bungin Tambun Kec. Padang Guci Hulu Kab. Kaur 38554

SURAT KETERANGAN

Nomor : 421.6/30/SMPN/09.05/KK/2025

Yang bertanda tangan dibawah ini, Kepala sekolah SMP N 9 KAUR Menerangkan bahwa :

Nama	: Ravi Putra lingga
NPM	: 2155201126
Program Studi	: Teknik Informatika
Perguruan Tinggi	: UNIVERSITAS MUHAMMADIYAH BENGKULU

Adalah benar nama tersebut telah melaksanakan penelitian atau observasi di SMPN 9 KAUR dalam rangka penyusunan skripsi dengan judul :

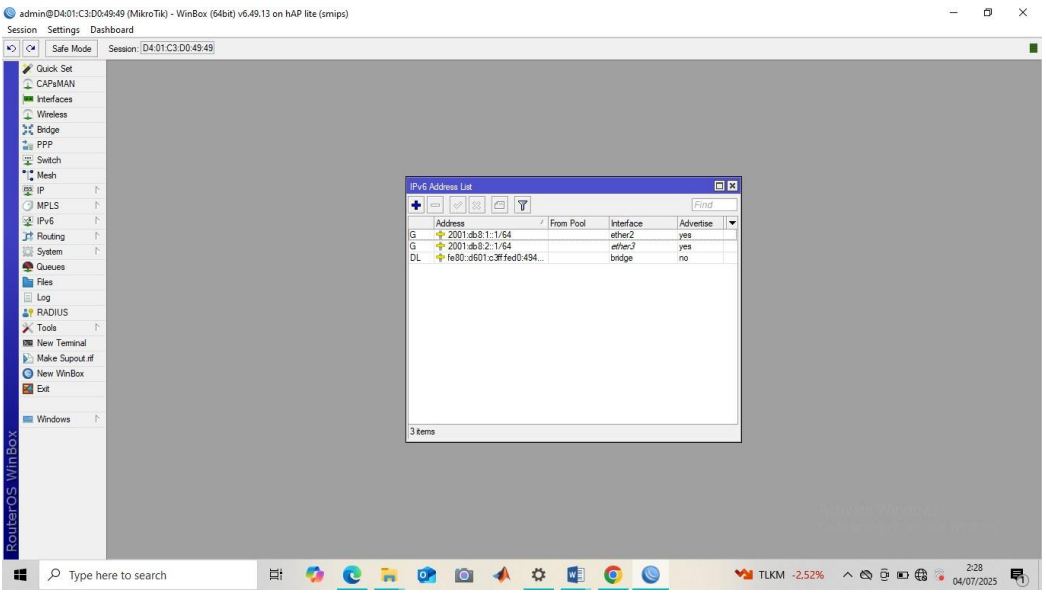
"ANALISIS PERBANDINGAN ROUTING STATIC DENGAN PENERAPAN IPV4 DAN IPV6 PADA SMP N 9 KAUR"

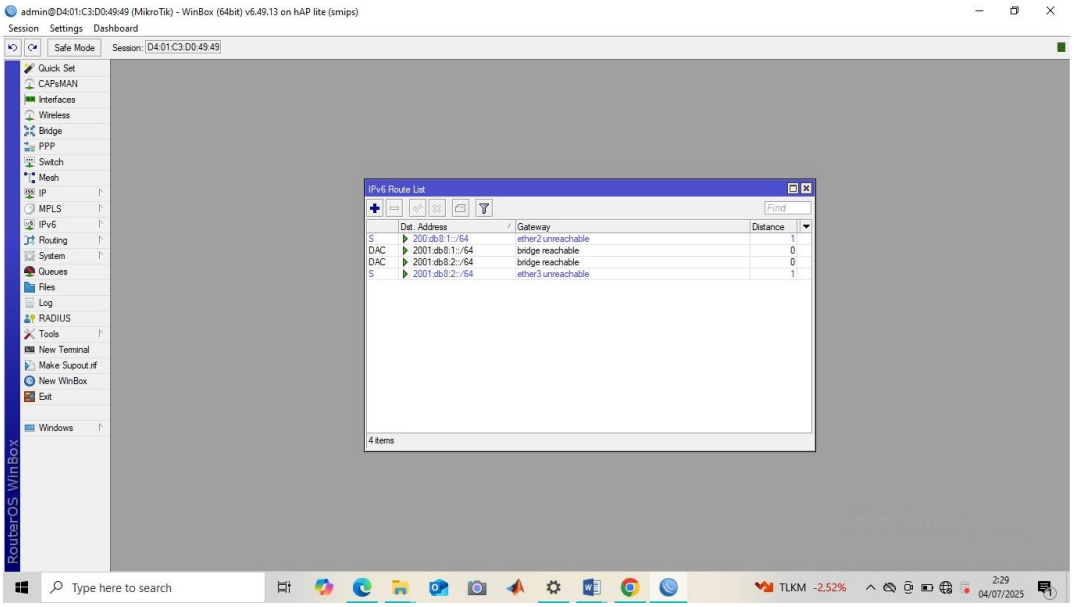
Demikian surat keterangan ini dibuat dengan sebenarnya untuk dipergunakan sebagaimana mestinya.

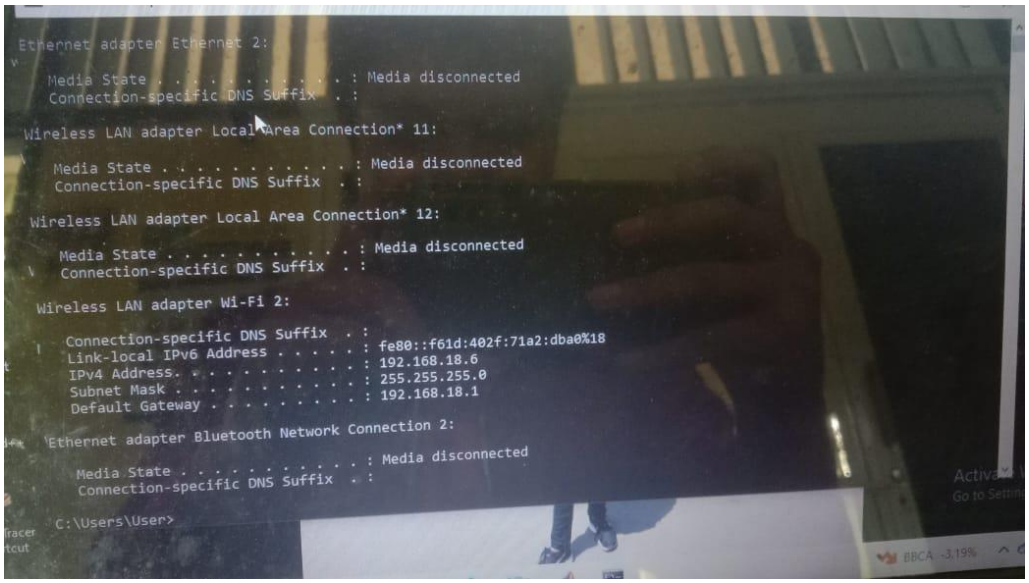
Bungin Tambun, 13 Juni 2025
Kepala Sekolah

Histi Maryani,M.Pd.
Nip. 19810101 200604 2 019

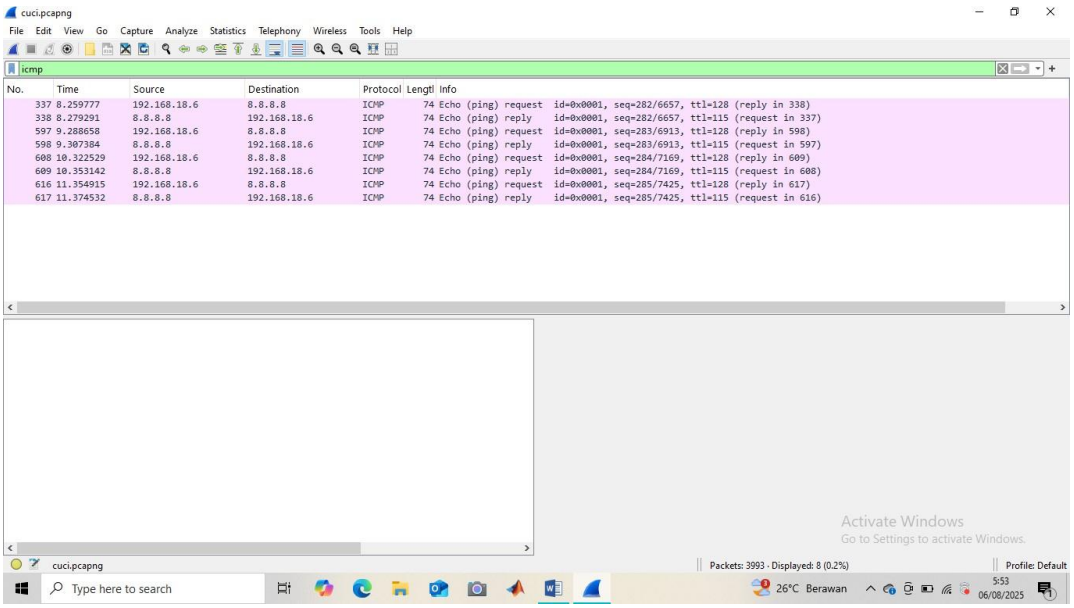
No	Nama	Jabatan	Keterangan
1	Hesti Maryani, M.Pd	Kepala Sekolah	Perizinan
2	Ica Trisnawati, S.Kom	Guru TIK	Observasi & Wawancara

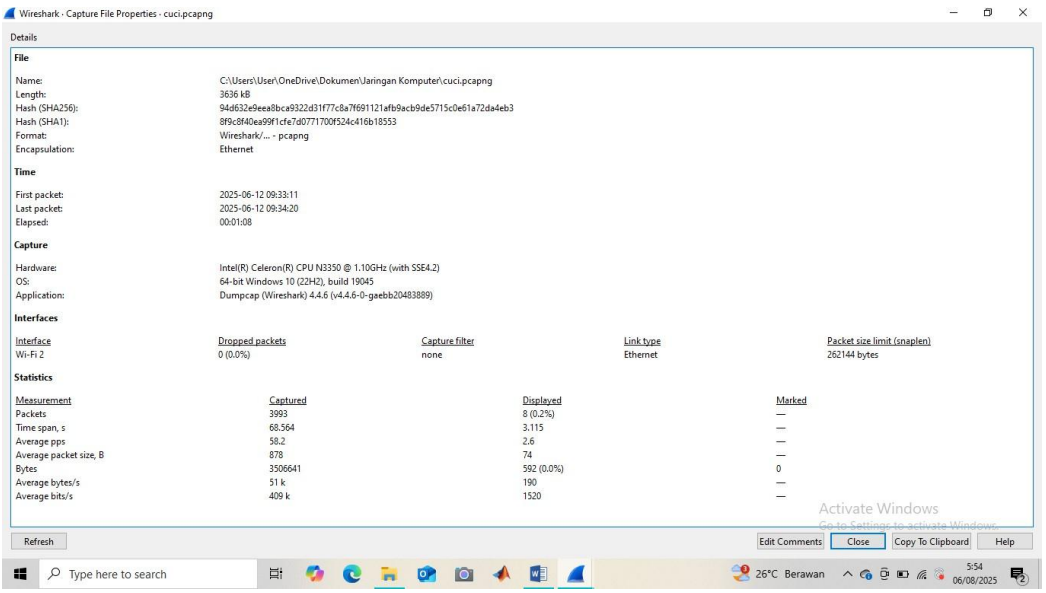



admin@D4:01:C3:D0:49:49 (MikroTik) - WinBox (64bit) v6.49.13 on hAP lite (smips)
Session Settings Dashboard
Safe Mode
Session: D4:01:C3:D0:49:49
Quick Set
CAPsMAN
Interfaces
Wireless
Bridge
PPP
Switch
Mesh
IP
MPLS
IPv6
Routing
System
Queues
Files
Log
RADIUS
Tools
New Terminal
Make Supout.rif
New WinBox
Exit
Windows
RouterOS WinBox
IPv6 Route List
Find
Dst. Address
Gateway
Distance
S 200:db8:1::/64 ether2 unreachable 1
DAC 2001:db8:1::/64 bridge reachable 0
DAC 2001:db8:2::/64 bridge reachable 0
S 2001:db8:2::/64 ether3 unreachable 1
4 items
Type here to search
TLKM -2,52%
2:29
04/07/2025

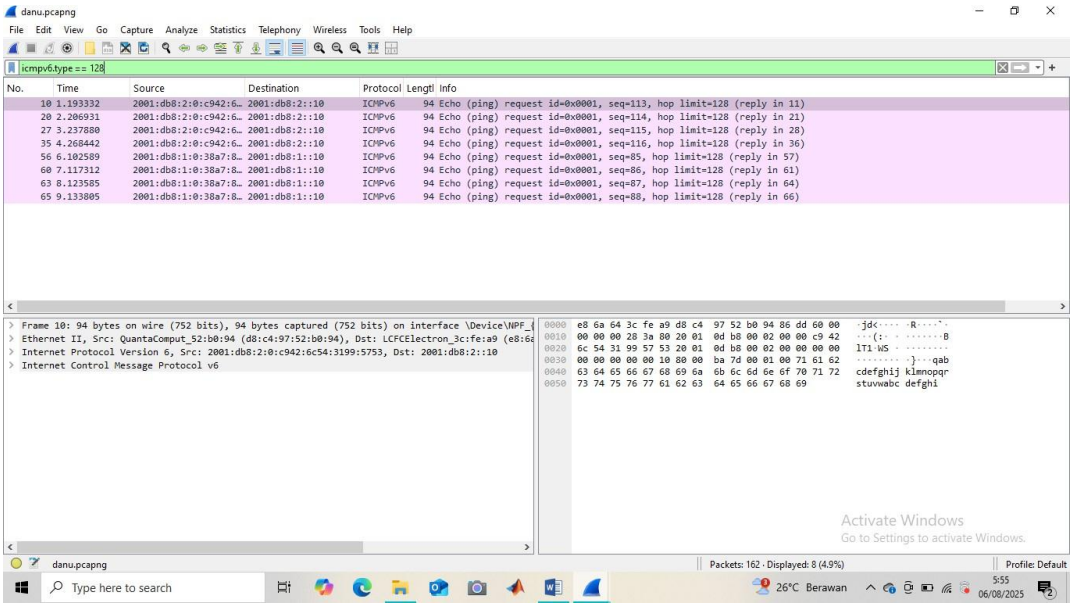

Ethernet adapter Ethernet 2:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Local Area Connection* 11:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Local Area Connection* 12:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Wireless LAN adapter Wi-Fi 2:
Connection-specific DNS Suffix . :
Link-local IPv6 Address . . . . . : fe80::f61d:402f:71a2:dba0%18
IPv4 Address. . . . . : 192.168.18.6
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.18.1
Ethernet adapter Bluetooth Network Connection 2:
Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
C:\Users\User>

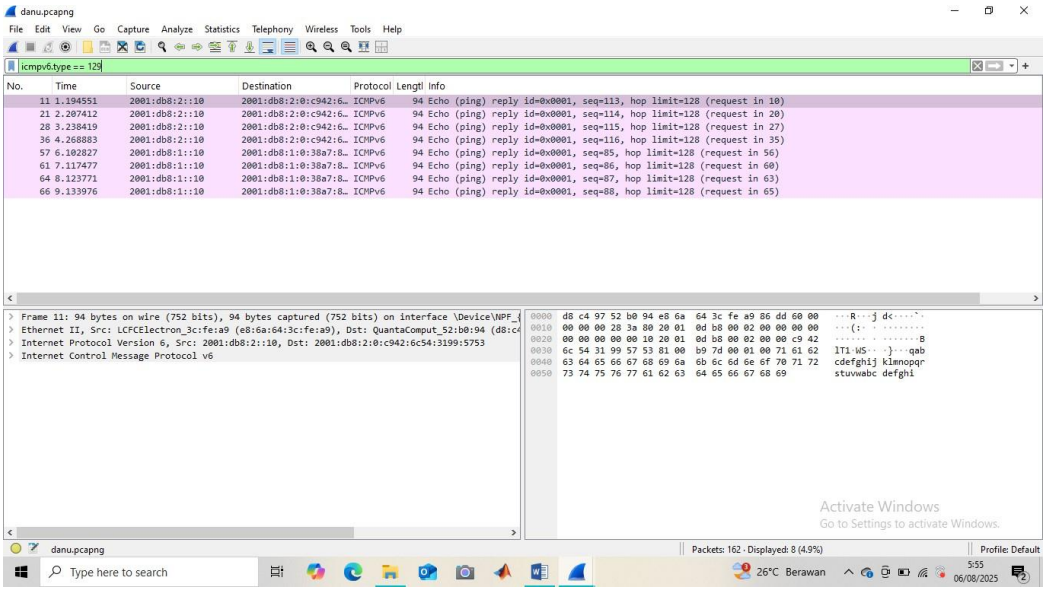
IPv4

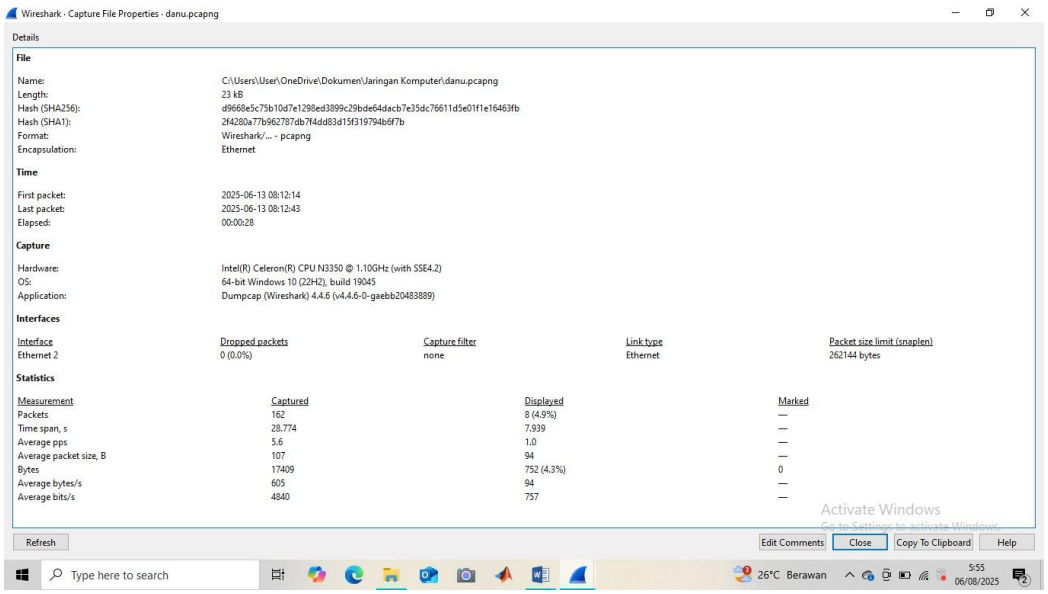

cuci.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
icmp
No. Time Source Destination Protocol Lengtl Info
337 8.259777 192.168.18.6 8.8.8.8 ICMP 74 Echo (ping) request id=0x0001, seq=282/6657, ttl=128 (reply in 338)
338 8.279291 8.8.8.8 192.168.18.6 ICMP 74 Echo (ping) reply id=0x0001, seq=282/6657, ttl=115 (request in 337)
597 9.288658 192.168.18.6 8.8.8.8 ICMP 74 Echo (ping) request id=0x0001, seq=283/6913, ttl=128 (reply in 598)
598 9.307384 8.8.8.8 192.168.18.6 ICMP 74 Echo (ping) reply id=0x0001, seq=283/6913, ttl=115 (request in 597)
608 10.322529 192.168.18.6 8.8.8.8 ICMP 74 Echo (ping) request id=0x0001, seq=284/7169, ttl=128 (reply in 609)
609 10.353142 8.8.8.8 192.168.18.6 ICMP 74 Echo (ping) reply id=0x0001, seq=284/7169, ttl=115 (request in 608)
616 11.354915 192.168.18.6 8.8.8.8 ICMP 74 Echo (ping) request id=0x0001, seq=285/7425, ttl=128 (reply in 617)
617 11.374532 8.8.8.8 192.168.18.6 ICMP 74 Echo (ping) reply id=0x0001, seq=285/7425, ttl=115 (request in 616)
Activate Windows
Go to Settings to activate Windows.
cuci.pcapng
Packets: 3993 · Displayed: 8 (0.2%)
Profile: Default
Type here to search
26°C Berawan
5:53
06/08/2025


Wireshark · Capture File Properties · cuci.pcapng
Details
File
Name: C:\Users\User\OneDrive\Dokumen\Jaringan Komputer\cuci.pcapng
Length: 3636 kB
Hash (SHA256): 94d632e9eea8bca9322d31f77c8a7f691121afb9acb9de5715c0e61a72da4eb3
Hash (SHA1): 8f9c8f40ea99f1cfe7d0771700f524c416b18553
Format: Wireshark/... - pcapng
Encapsulation: Ethernet
Time
First packet: 2025-06-12 09:33:11
Last packet: 2025-06-12 09:34:20
Elapsed: 00:01:08
Capture
Hardware: Intel(R) Celeron(R) CPU N3350 @ 1.10GHz (with SSE4.2)
OS: 64-bit Windows 10 (22H2), build 19045
Application: Dumpcap (Wireshark) 4.4.6 (v4.4.6-0-gaebb20483889)
Interfaces
Interface Dropped packets Capture filter Link type Packet size limit (snaplen)
Wi-Fi 2 0 (0.0%) none Ethernet 262144 bytes
Statistics
Measurement Captured Displayed Marked
Packets 3993 8 (0.2%) —
Time span, s 68.564 3.115 —
Average pps 58.2 2.6 —
Average packet size, B 878 74 —
Bytes 3506641 592 (0.0%) 0
Average bytes/s 51 k 190 —
Average bits/s 409 k 1520 —
Activate Windows
Go to Settings to activate Windows.
Refresh
Edit Comments
Close
Copy To Clipboard
Help
Type here to search
26°C Berawan
5:54
06/08/2025

IPv6


danu.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
icmpv6.type == 128
No. Time Source Destination Protocol Lengtl Info
10 1.193332 2001:db8:2:0:c942:6… 2001:db8:2::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=113, hop limit=128 (reply in 11)
20 2.206931 2001:db8:2:0:c942:6… 2001:db8:2::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=114, hop limit=128 (reply in 21)
27 3.237880 2001:db8:2:0:c942:6… 2001:db8:2::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=115, hop limit=128 (reply in 28)
35 4.268442 2001:db8:2:0:c942:6… 2001:db8:2::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=116, hop limit=128 (reply in 36)
56 6.102589 2001:db8:1:0:38a7:8… 2001:db8:1::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=85, hop limit=128 (reply in 57)
60 7.117312 2001:db8:1:0:38a7:8… 2001:db8:1::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=86, hop limit=128 (reply in 61)
63 8.123585 2001:db8:1:0:38a7:8… 2001:db8:1::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=87, hop limit=128 (reply in 64)
65 9.133805 2001:db8:1:0:38a7:8… 2001:db8:1::10 ICMPv6 94 Echo (ping) request id=0x0001, seq=88, hop limit=128 (reply in 66)
Frame 10: 94 bytes on wire (752 bits), 94 bytes captured (752 bits) on interface \Device\NPF_{
Ethernet II, Src: QuantaComput_52:b0:94 (d8:c4:97:52:b0:94), Dst: LCFCElectron_3c:fe:a9 (e8:6a
Internet Protocol Version 6, Src: 2001:db8:2:0:c942:6c54:3199:5753, Dst: 2001:db8:2::10
Internet Control Message Protocol v6
0000 e8 6a 64 3c fe a9 d8 c4 97 52 b0 94 86 dd 60 00 ·jd<····· ·R····`·
0010 00 00 00 28 3a 80 20 01 0d b8 00 02 00 00 c9 42 ···(:· · ·····B
0020 6c 54 31 99 57 53 20 01 0d b8 00 02 00 00 00 00 lT1·WS · ·····
0030 00 00 00 00 00 10 80 00 ba 7d 00 01 00 71 61 62 ·····}···qab
0040 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70 71 72 cdefghij klmnopqr
0050 73 74 75 76 77 61 62 63 64 65 66 67 68 69 stuvwabc defghi
Activate Windows
Go to Settings to activate Windows.
Packets: 162 · Displayed: 8 (4.9%)
Profile: Default
Type here to search
26°C Berawan
5:55
06/08/2025


danu.pcapng
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
icmpv6.type == 129
No. Time Source Destination Protocol Lengtl Info
11 1.194551 2001:db8:2::10 2001:db8:2:0:c942:6… ICMPv6 94 Echo (ping) reply id=0x0001, seq=113, hop limit=128 (request in 10)
21 2.207412 2001:db8:2::10 2001:db8:2:0:c942:6… ICMPv6 94 Echo (ping) reply id=0x0001, seq=114, hop limit=128 (request in 20)
28 3.238419 2001:db8:2::10 2001:db8:2:0:c942:6… ICMPv6 94 Echo (ping) reply id=0x0001, seq=115, hop limit=128 (request in 27)
36 4.268883 2001:db8:2::10 2001:db8:2:0:c942:6… ICMPv6 94 Echo (ping) reply id=0x0001, seq=116, hop limit=128 (request in 35)
57 6.102827 2001:db8:1::10 2001:db8:1:0:38a7:8… ICMPv6 94 Echo (ping) reply id=0x0001, seq=85, hop limit=128 (request in 56)
61 7.117477 2001:db8:1::10 2001:db8:1:0:38a7:8… ICMPv6 94 Echo (ping) reply id=0x0001, seq=86, hop limit=128 (request in 60)
64 8.123771 2001:db8:1::10 2001:db8:1:0:38a7:8… ICMPv6 94 Echo (ping) reply id=0x0001, seq=87, hop limit=128 (request in 63)
66 9.133976 2001:db8:1::10 2001:db8:1:0:38a7:8… ICMPv6 94 Echo (ping) reply id=0x0001, seq=88, hop limit=128 (request in 65)
Frame 11: 94 bytes on wire (752 bits), 94 bytes captured (752 bits) on interface \Device\NPF_{
Ethernet II, Src: LCFCElectron_3c:fe:a9 (e8:6a:64:3c:fe:a9), Dst: QuantaComput_52:b0:94 (d8:c4
Internet Protocol Version 6, Src: 2001:db8:2::10, Dst: 2001:db8:2:0:c942:6c54:3199:5753
Internet Control Message Protocol v6
0000 d8 c4 97 52 b0 94 e8 6a 64 3c fe a9 86 dd 60 00 ···R···j d<····`·
0010 00 00 00 28 3a 80 20 01 0d b8 00 02 00 00 00 00 ···(:· · ·····
0020 00 00 00 00 00 10 20 01 0d b8 00 02 00 00 c9 42 ····· · ·····B
0030 6c 54 31 99 57 53 81 00 b9 7d 00 01 00 71 61 62 lT1·WS·· ·}···qab
0040 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70 71 72 cdefghij klmnopqr
0050 73 74 75 76 77 61 62 63 64 65 66 67 68 69 stuvwabc defghi
Activate Windows
Go to Settings to activate Windows.
Packets: 162 · Displayed: 8 (4.9%)
Profile: Default
Type here to search
26°C Berawan
5:55
06/08/2025


Wireshark · Capture File Properties · danu.pcapng
Details
File
Name: C:\Users\User\OneDrive\Dokumen\Jaringan Komputer\danu.pcapng
Length: 23 kB
Hash (SHA256): d9668e5c75b10d7e1298ed3899c29bde64dacb7e35dc76611d5e01f1e16463fb
Hash (SHA1): 2f4280a77b962787db7f4dd83d15f319794b6f7b
Format: Wireshark/... - pcapng
Encapsulation: Ethernet
Time
First packet: 2025-06-13 08:12:14
Last packet: 2025-06-13 08:12:43
Elapsed: 00:00:28
Capture
Hardware: Intel(R) Celeron(R) CPU N3350 @ 1.10GHz (with SSE4.2)
OS: 64-bit Windows 10 (22H2), build 19045
Application: Dumpcap (Wireshark) 4.4.6 (v4.4.6-0-gaebb20483889)
Interfaces
Interface Dropped packets Capture filter Link type Packet size limit (snaplen)
Ethernet 2 0 (0.0%) none Ethernet 262144 bytes
Statistics
Measurement Captured Displayed Marked
Packets 162 8 (4.9%) —
Time span, s 28.774 7.939 —
Average pps 5.6 1.0 —
Average packet size, B 107 94 —
Bytes 17409 752 (4.3%) 0
Average bytes/s 605 94 —
Average bits/s 4840 757 —
Activate Windows
Refresh
Edit Comments
Close
Copy To Clipboard
Help
Type here to search
26°C Berawan
5:55
06/08/2025