

main.c

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #include <unistd.h>
5 #include <arpa/inet.h>
6 #define PORT 8080
7 #define BUFFER_SIZE 1024
8 int main() {
9     int sockfd;
10    char buffer[BUFFER_SIZE];
11    struct sockaddr_in servaddr;
12    socklen_t len;
13    const char *message = "Hello from UDP client";
14    if ((sockfd = socket(AF_INET, SOCK_DGRAM, 0)) < 0) {
15        perror("Socket creation failed");
16        exit(EXIT_FAILURE);
17    }
18    memset(&servaddr, 0, sizeof(servaddr));
19    // Filling server information
20    servaddr.sin_family = AF_INET; // IPv4
21    servaddr.sin_addr.s_addr = INADDR_ANY; // Server IP address
22    servaddr.sin_port = htons(PORT); // Server port
23    sendto(sockfd, message, strlen(message), MSG_CONFIRM, (const struct sockaddr *)
        &servaddr, sizeof(servaddr));
24    printf("Message sent to server.\n");
25    len = sizeof(servaddr);
26    int n = recvfrom(sockfd, (char *)buffer, BUFFER_SIZE, MSG_WAITALL, (struct sockaddr *)
        &servaddr, &len);
27    buffer[n] = '\0';
28    printf("Server: %s\n", buffer);
29    close(sockfd);
30    return 0;
31 }
```

Output

./tmp/UltfyHvt0J.o
UDP Server is listening on port 8080

Clear



ENG
IN

13:14
25-10-2024

NW LAB 1: Basics of Socket Pro x Online C Compiler - Programiz x ChatGPT

programiz.com/c-programming/online-compiler/

Programiz

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main.c

```
17 consecutive_ones++;
18
19 if (consecutive_ones == 5) {
20     // Insert a 0 after five consecutive 1's
21     stuffed_output[bit_count / 8] &= ~(1 << (7 - (bit_count % 8)));
22     bit_count++;
23     consecutive_ones = 0;
24 }
25 } else {
26     consecutive_ones++;
27 }
28 }
29
30 return bit_count; // Return total number of bits after stuffing
31 }
32
33
34 int main() {
35     uint8_t data[] = { 0x7E, 0xFF, 0x7E }; // Example bit stream (in bytes)
36     uint8_t stuffed_output[MAX_BITS / 8] = {0}; // Output array for stuffed bits
37     int input_size = 24; // Number of bits in the input data
38
39     // Perform bit stuffing
40     int stuffed_size = bit_stuffing(data, input_size, stuffed_output);
41
42     // Print stuffed data
43     printf("Stuffed data (hex): ");
44     for (int i = 0; i < (stuffed_size + 7) / 8; i++) {
45         printf("%02X ", stuffed_output[i]);
46     }
47     printf("\nTotal bits after stuffing: %d\n", stuffed_size);
48
49     return 0;
50 }
51
```

Output

Clear

```
./tmp/jr88vNq4Uk.o
Stuffed data (hex): 7D 7D DF 40
Total bits after stuffing: 27

=== Code Execution Successful ===
```

Google Chrome

Windows Taskbar

13:07 25-10-2024





Wireshark interface showing a packet capture from Wi-Fi. The packet list displays several ICMPv6 Neighbor Solicitation and Router Solicitation messages. The selected packet (442) is an ICMPv6 Router Solicitation from 58:ce:2a:ff:2b:0c to ff02::2. The packet details pane shows the Ethernet II header, IPv6 header, and ICMPv6 Router Solicitation structure. The packet bytes pane displays the raw data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
383	5.2...	::	ff02::1:f...	ICMPv6	78	Neighbor Solicitation for fe80::d686:cdf3:656a:f1b4
14...	19...	::	ff02::1:f...	ICMPv6	78	Neighbor Solicitation for fe80::d686:cdf3:656a:f1b4
249	3.3...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 7e:83:fe:59:18:9c
384	5.2...	fe80::...	ff02::2	ICMPv6	62	Router Solicitation
442	6.1...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 58:ce:2a:ff:2b:0c
551	7.3...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 58:ce:2a:ff:2b:0c
606	8.4...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from bc:5e:33:79:05:51
11...	15...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from bc:5e:33:79:05:61
12...	17...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 2a:3d:7e:9b:5e:21
14...	19...	fe80::...	ff02::2	ICMPv6	62	Router Solicitation
15...	20...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 58:ce:2a:ff:2b:0c
16...	21...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 58:ce:2a:ff:2b:0c
19...	24...	fe80::...	ff02::2	ICMPv6	70	Router Solicitation from 4a:05:e5:db:b8:63

Frame 442: 70 bytes on wire (560 bits), 70 bytes captured (560 bits) on interface \Device\NPF...
> Ethernet II, Src: Intel_ff:2b:0c (58:ce:2a:ff:2b:0c), Dst: IPv6mcast_02 (33:33:00:00:00:02)
> Internet Protocol Version 6, Src: fe80::d686:cdf3:656a:f1b4, Dst: ff02::2
> Internet Control Message Protocol v6

Packet details for Frame 442:

- Ethernet II, Src: Intel_ff:2b:0c (58:ce:2a:ff:2b:0c), Dst: IPv6mcast_02 (33:33:00:00:00:02)
- Internet Protocol Version 6, Src: fe80::d686:cdf3:656a:f1b4, Dst: ff02::2
- Internet Control Message Protocol v6

Packet bytes (hex): 33 33 00 00 00 02 58 ce 2a ff 2b 0c 86 dd 60 00 00 00 00 10 3a ff fe 80 00 00 00 00 00 00 d6 86 cd f3 65 6a f1 b4 ff 02 00 00 00 00 00 00 00 00 00 00 00 02 85 00 d1 ba 00 00 00 00 01 01 58 ce 2a ff 2b 0c

Packet bytes (ASCII): 33...X...*+...
...ej...
X...+

Capturing from Wi-Fi

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http

No.	Time	Source	Destination	Protocol	Length	Info
240	321.151618	192.168.78.185	49.44.116.231	HTTP	178	GET /ncsi.txt HTTP/1.1
243	321.626686	49.44.116.231	192.168.78.185	HTTP	233	HTTP/1.1 200 OK (text/plain)

Frame 240: 178 bytes on wire (1424 bits), 178 bytes captured (1424 bits) on interface
> Ethernet II, Src: CloudNetwork_7e:5a:bf (cc:5e:f8:7e:5a:bf), Dst: 7a:95:2a:78:b3:57 (7
> Internet Protocol Version 4, Src: 192.168.78.185, Dst: 49.44.116.231
> Transmission Control Protocol, Src Port: 53363, Dst Port: 80, Seq: 1, Ack: 1, Len: 124
> Hypertext Transfer Protocol

0000 7a 95 2a 78 b3 57 cc 5e f8 7e 5a bf 08 00 45 00 z*xW.^~Z...E
0010 00 a4 16 01 40 00 80 06 2e de c0 a8 4e b9 31 2c ...@... ..N-1,
0020 74 e7 d0 73 00 50 dc 71 d7 64 b8 9c cf fb 50 18 t..s-P.q..d...P
0030 01 02 ee ae 00 00 47 45 54 20 2f 6e 63 73 69 2eGE T /ncsi.
0040 74 78 74 20 48 54 54 50 2f 31 2e 31 0d 0a 48 6f txt HTTP /1.1..Ho
0050 73 74 3a 20 77 77 77 2e 6d 73 66 74 6e 63 73 69 st: www.msftncsi
0060 2e 63 6f 6d 0d 0a 55 73 65 72 2d 41 67 65 6e 74 .com..Us er-Agent
0070 3a 20 47 6f 2d 68 74 74 70 2d 63 6c 69 65 6e 74 ; Go-htt p-client
0080 2f 31 2e 31 0d 0a 41 63 63 65 70 74 2d 45 6e 63 /1.1..Ac cept-Enc
0090 6f 64 69 6e 67 3a 20 67 7a 69 70 0d 0a 43 6f 6e oding: g zip..Con
00a0 6e 65 63 74 69 6f 6e 3a 20 63 6c 6f 73 65 0d 0a nnection: close..
00b0 0d 0a ..

Hypertext Transfer Protocol (http), 124 bytes

Packets: 1149 · Displayed: 2 (0.2%)

Profile: Default

22:45 22-10-2024

NW LAB 1: Basics of Socket Pro

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ChatGPT

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main.c

1 #include <stdio.h>
2 #include <stdint.h>
3
4 unsigned short checksum(unsigned short *buf, int mwords) {
5 unsigned long sum = 0;
6
7 for(int i = 0; i < mwords; i++) {
8 sum += *buf++;
9 }
10
11 // Fold 32-bit sum to 16 bits
12 while (sum >> 16) {
13 sum = (sum & 0xFFFF) + (sum >> 16);
14 }
15
16 return (unsigned short)(-sum);
17 }
18
19 int main() {
20 // Example data (e.g., IP header or TCP/UDP packet)
21 unsigned short data[] = {0x4500, 0x003c, 0x1c46, 0x4000, 0x4006, 0xb1e6, 0xc0a8, 0x0001,
22 0xc0a8, 0x00c7};
23 int mwords = sizeof(data) / 2;
24
25 unsigned short result = checksum(data, mwords);
26 printf("Checksum: 0x%04x\n", result);
27
28 return 0;
29 }

Output

/tmp/TwI6OCMHtL.o
Checksum: 0xea76

--- Code Execution Successful ---

Clear

Windows Taskbar

13:05
25-10-2024

Capturing from Wi-Fi

FileEditViewGoCaptureAnalyzeStatisticsTelephonyWirelessToolsHelp

arp

No.	Time	Source	Destination	Protocol	Length	Info
5	3.820292	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
25	67.096033	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
50	86.275976	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
68	144.463218	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
132	249.327724	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
200	276.443927	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
251	326.181786	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
559	386.707815	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
597	415.500432	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
675	441.491995	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
821	504.892459	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
841	551.878027	7a:95:2a:78:b3:57	CloudNetwork_7e:5a:...	ARP	42	Who has 192.168.78.185? Tell 192.168.78.8
6	3.820332	CloudNetwork_7e:5a:...	7a:95:2a:78:b3:57	ARP	42	192.168.78.185 is at cc:5e:f8:7e:5a:bf
26	67.096059	CloudNetwork_7e:5a:...	7a:95:2a:78:b3:57	ARP	42	192.168.78.185 is at cc:5e:f8:7e:5a:bf

> Frame 132: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface \Device\NPF...
> Ethernet II, Src: 7a:95:2a:78:b3:57 (7a:95:2a:78:b3:57), Dst: CloudNetwork_7e:5a:bf (c...)
> Address Resolution Protocol (request)

0000cc 5e f8 7e 5a bf 7a 95 2a 78 b3 57 08 06 00 01
001008 00 06 04 00 01 7a 95 2a 78 b3 57 c0 a8 4e 08
002000 00 00 00 00 00 c0 a8 4e b9

.....Z.z.*x.W...
.....z.*x.W..N..
.....N..

Address Resolution Protocol (arp), 28 bytes

Packets: 866 · Displayed: 24 (2.8%)

Profile: Default

Search

22:42 22-10-2024

207 KB



Wi-Fi
File Edit View Go

tcp.stream eq 32

No.	Time
1049	23.252767
1053	23.499914
1056	23.500376
1084	24.736442
1085	24.777062

> Frame 1084: 148 by
> Ethernet II, Src:
> Internet Protocol
> Transmission Contr
> Simple Mail Transf

0000	e8 fb 1c 49 57
0010	43 3f 00 5e 06
0020	00 00 00 00 00
0030	ae 84 7f 7d 4f
0040	5c 48 50 18 01
0050	74 70 2e 67 6d
0060	54 50 20 39 38
0070	2d 32 65 30 35
0080	33 30 36 33 30

Wireshark · Follow TCP Stream (tcp.stream eq 32) · Wi-Fi

```
220 smtp.gmail.com ESMTP 98e67ed59e1d1-2e058a090ccsm1430630a91.0 - gsmt
hello
502-5.5.1 Unrecognized command. For more information, go to
502 5.5.1 https://support.google.com/a/answer/3221692
98e67ed59e1d1-2e058a090ccsm1430630a91.0 - gsmt
helo
501-5.5.4 Empty HELO/EHLO argument not allowed, closing connection.
501 5.5.4 https://support.google.com/mail/?p=helo
98e67ed59e1d1-2e058a090ccsm1430630a91.0 - gsmt
```

10 client pkts, 3 server pkts, 4 turns.

Entire conversation (421 bytes) Show data as ASCII Stream 32 Find Next

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tcp

No.	Time	Source	Destination	Protocol	Length	Info
245	321.626686	2603:1040:a06:6::1	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 60080 [ACK] Seq=170 Ack=100 Win=7241 Len=0 SLE=99 SRE=100
8	12.031037	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
20	57.884081	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
54	103.355087	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
71	149.668441	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
78	195.318720	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
90	240.831711	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
221	286.999835	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
352	332.210500	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
553	378.512829	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
605	424.291293	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
724	469.748937	2603:1046:c06:8a0::2	2409:40f4:2a:bb3d:4...	TCP	86	[TCP Keep-Alive ACK] 443 → 53310 [ACK] Seq=1 Ack=2 Win=16382 Len=0 SLE=1 SRE=2
616	425.538188	2620:1ec:21::16	2409:40f4:2a:bb3d:4...	TCP	86	443 → 53378 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=0 MSS=1300 WS=256 SACK_PERM
621	425.995706	2620:1ec:21::16	2409:40f4:2a:bb3d:4...	TCP	74	443 → 53378 [ACK] Seq=1 Ack=1828 Win=4195072 Len=0

Frame 54: 86 bytes on wire (688 bits), 86 bytes captured (688 bits) on interface \Device\NPF...

Ethernet II, Src: 7a:95:2a:78:b3:57 (7a:95:2a:78:b3:57), Dst: CloudNetwork_7e:5a:bf...

Internet Protocol Version 6, Src: 2603:1046:c06:8a0::2, Dst: 2409:40f4:2a:bb3d:4e8::...

Transmission Control Protocol, Src Port: 443, Dst Port: 53310, Seq: 1, Ack: 2, Len: 0

Source Port: 443
Destination Port: 53310
[Stream index: 1]
[Stream Packet Number: 6]
[Conversation completeness: Incomplete (12)]
[TCP Segment Len: 0]
Sequence Number: 1 (relative sequence number)
Sequence Number (raw): 359222437
[Next Sequence Number: 1 (relative sequence number)]
Acknowledgment Number: 2 (relative ack number)

0000 cc 5e f8 7e 5a bf 7a 95 2a 78 b3 57 86 dd 60 00
0010 c2 ca 00 20 06 6e 26 03 10 46 0c 06 08 a0 00 00
0020 00 00 00 00 00 02 24 09 40 f4 00 2a bb 3d 04 e8
0030 7e 56 37 0a 4a 14 01 bb d0 3e 15 69 4c a5 9c 6d
0040 d4 53 80 10 3f fe 43 c1 00 00 01 01 05 0a 9c 6d
0050 d4 52 9c 6d d4 53

Transmission Control Protocol (tcp), 32 bytes

Packets: 831 · Displayed: 752 (90.5%)

Profile: Default

22:41 22-10-2024

Capturing from Wi-Fi

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udp

No.	Time	Source	Destination	Protocol	Length	Info
173	271.029184	192.168.78.185	192.168.78.8	DNS	92	Standard query 0x8496 AAAA mobile.events.data.microsoft.com
174	271.479527	192.168.78.185	192.168.78.8	DNS	92	Standard query 0x8496 AAAA mobile.events.data.microsoft.com
175	271.479556	192.168.78.185	192.168.78.8	DNS	92	Standard query 0x9e0c A mobile.events.data.microsoft.com
232	320.324483	192.168.78.185	192.168.78.8	DNS	76	Standard query 0xe3ea A www.msftncsi.com
233	320.324887	192.168.78.185	192.168.78.8	DNS	76	Standard query 0x2e62 AAAA www.msftncsi.com
93	244.604895	192.168.78.8	192.168.78.185	DNS	212	Standard query response 0x8846 A nav.smartscreen.microsoft.com CNAME prod-atm-wds-nav.trafficma...
94	244.610081	192.168.78.8	192.168.78.185	DNS	215	Standard query response 0x8846 A nav.smartscreen.microsoft.com CNAME prod-atm-wds-nav.trafficma...
176	271.484112	192.168.78.8	192.168.78.185	DNS	212	Standard query response 0x9e0c A mobile.events.data.microsoft.com CNAME mobile.events.data.traf...
177	271.484112	192.168.78.8	192.168.78.185	DNS	288	Standard query response 0x8496 AAAA mobile.events.data.microsoft.com CNAME mobile.events.data.t...
179	271.494193	192.168.78.8	192.168.78.185	DNS	199	Standard query response 0x8496 AAAA mobile.events.data.microsoft.com CNAME mobile.events.data.t...
180	272.118181	192.168.78.8	192.168.78.185	DNS	217	Standard query response 0x9e0c A mobile.events.data.microsoft.com CNAME mobile.events.data.traf...
234	320.749785	192.168.78.8	192.168.78.185	DNS	182	Standard query response 0xe3ea A www.msftncsi.com CNAME www.msftncsi.com.edgesuite.net CNAME a1...
235	320.749785	192.168.78.8	192.168.78.185	DNS	209	Standard query response 0x2e62 AAAA www.msftncsi.com CNAME www.msftncsi.com.edgesuite.net CNAME...
602	424.286899	192.168.78.185	192.168.78.8	DNS	81	Standard query 0x70f0 AAAA config.edge.skype.com

Frame 94: 215 bytes on wire (1720 bits), 215 bytes captured (1720 bits) on interface v...
> Ethernet II, Src: 7a:95:2a:78:b3:57 (7a:95:2a:78:b3:57), Dst: CloudNetwork_7e:5a:bf (c...
> Internet Protocol Version 4, Src: 192.168.78.8, Dst: 192.168.78.185
> User Datagram Protocol, Src Port: 53, Dst Port: 62383
> Domain Name System (response)

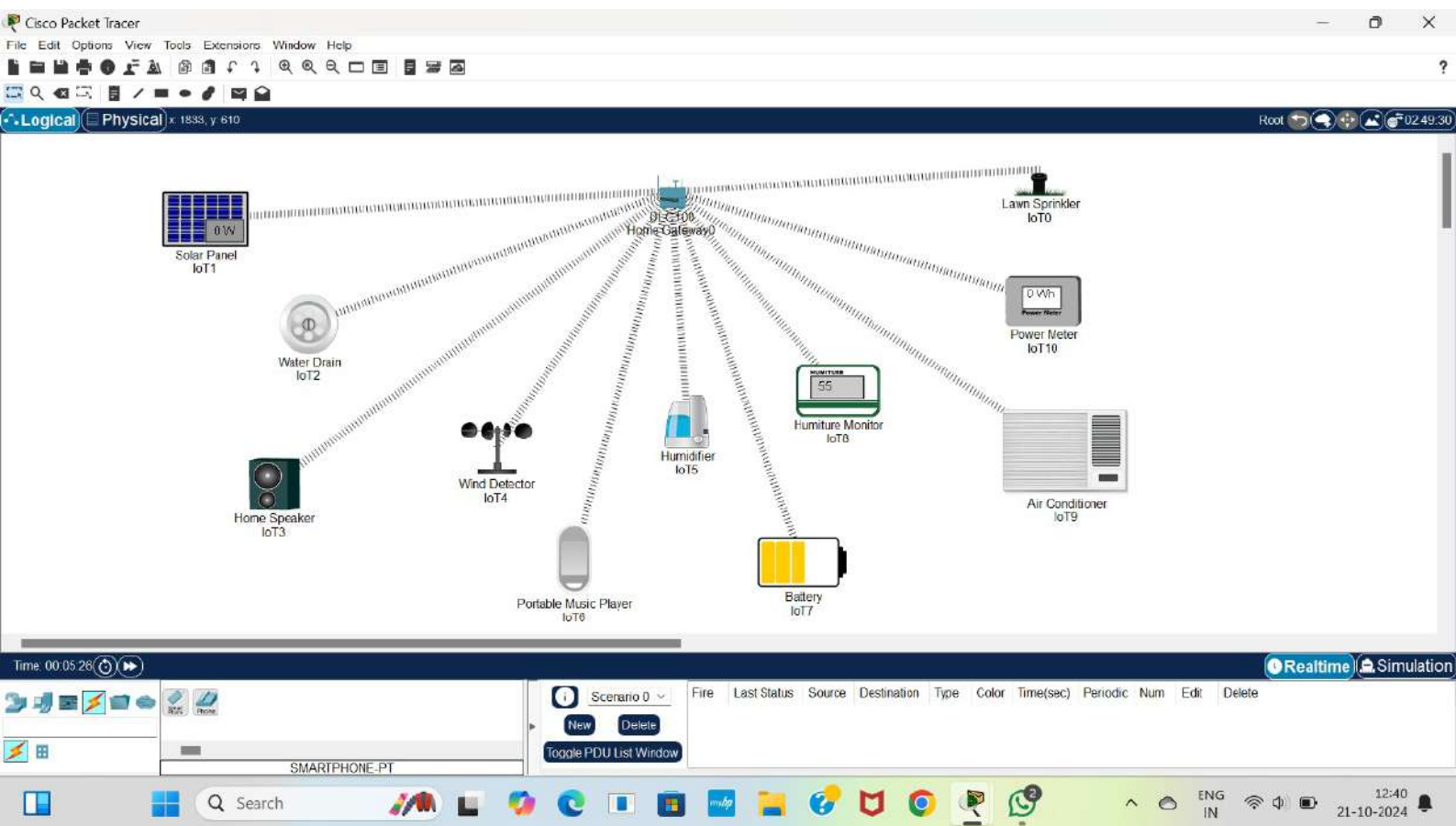
0000 cc 5e f8 7e 5a bf 7a 95 2a 78 b3 57 08 00 45 00 ...^~Z:z *xW~E~
0010 00 c9 9b 5e 40 00 40 11 80 b3 c0 a8 4e 08 c0 a8 ...^@~@ ...~N~
0020 4e b9 00 35 f3 af 00 b5 24 bd 88 46 81 80 00 01 N-5....\$~F....
0030 00 03 00 00 00 00 03 6e 61 76 0b 73 6d 61 72 74n av~smart
0040 73 63 72 65 65 6e 09 6d 69 63 72 6f 73 6f 66 74 screen~m icrosoft
0050 03 63 6f 6d 00 00 01 00 01 c0 0c 00 05 00 01 00 ~com.....
0060 00 07 9b 00 25 10 70 72 6f 64 20 61 74 6d 2d 77 ...~x~pr od~atm~w
0070 64 73 2d 6e 61 76 0e 74 72 61 66 66 69 63 6d 61 ds~nav~t rafficma
0080 6e 61 67 65 72 03 6e 65 74 00 c0 3b 00 05 00 01 nager~ne t~;...
0090 00 00 00 f7 00 31 0f 70 72 6f 64 2d 61 67 69 631~p rod~agic
00a0 2d 63 69 6e 2d 33 0c 63 65 6e 74 72 61 6c 69 6e ~cin~3~c entralin
00b0 64 69 61 08 63 6c 6f 75 64 61 70 70 05 61 7a 75 dia~clou dapp~azu
00c0 72 65 03 63 6f 6d 00 c0 6c 00 01 00 01 00 00 00 re~com~ 1~.....
00d0 07 00 04 14 eb c2 72r

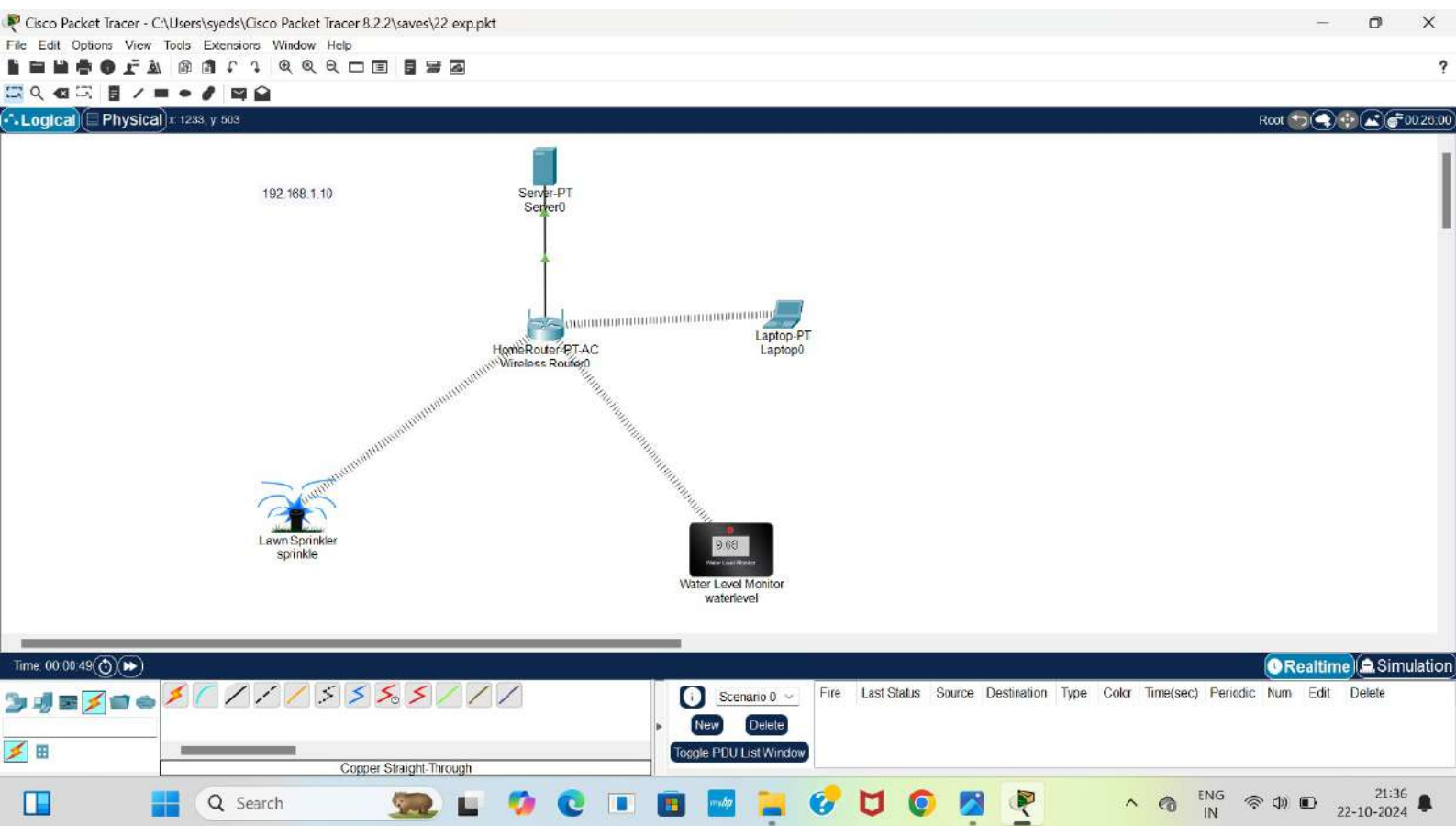
Domain Name System (dns), 173 bytes

Packets: 605 · Displayed: 19 (3.1%)

Profile: Default

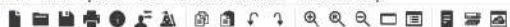
22:39 22-10-2024



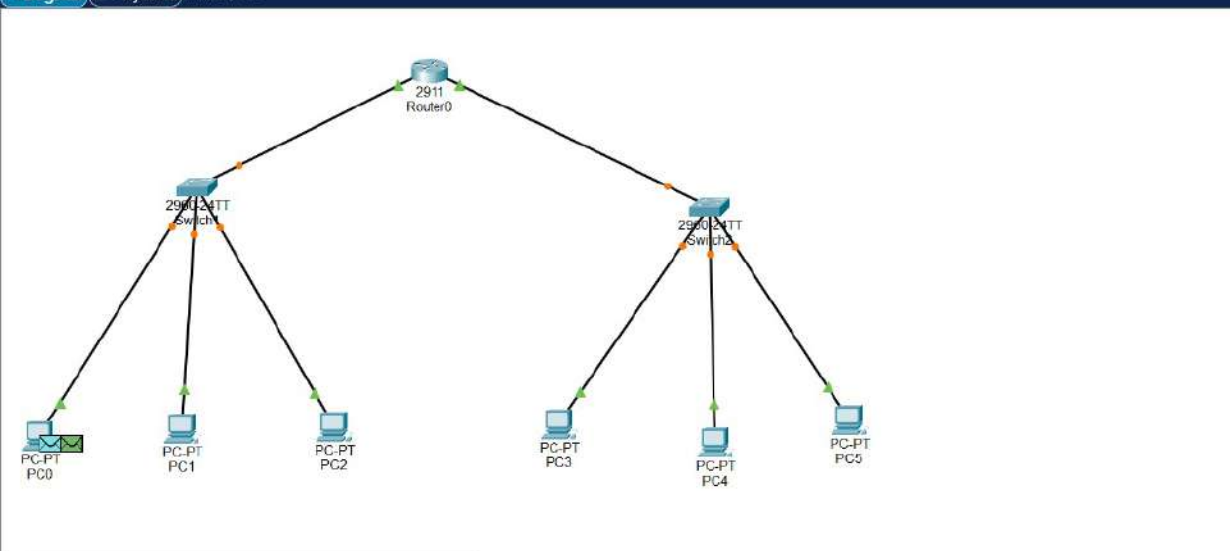


Cisco Packet Tracer - C:\Users\syeds\Cisco Packet Tracer 8.2.2\saves\16 exp.pkt

File Edit Options View Tools Extensions Window Help



Logical Physical x 1438, y 185



Simulation Panel

Event List Close (Alt + I)

Vis.	Time(sec)	Last Device
	0.000	--
	0.000	--

Reset Simulation ☒ Constant Delay Captured to: 0.000 s

Play Controls



Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters Show All/None

Time: 00:00:19.558 PLAY CONTROLS



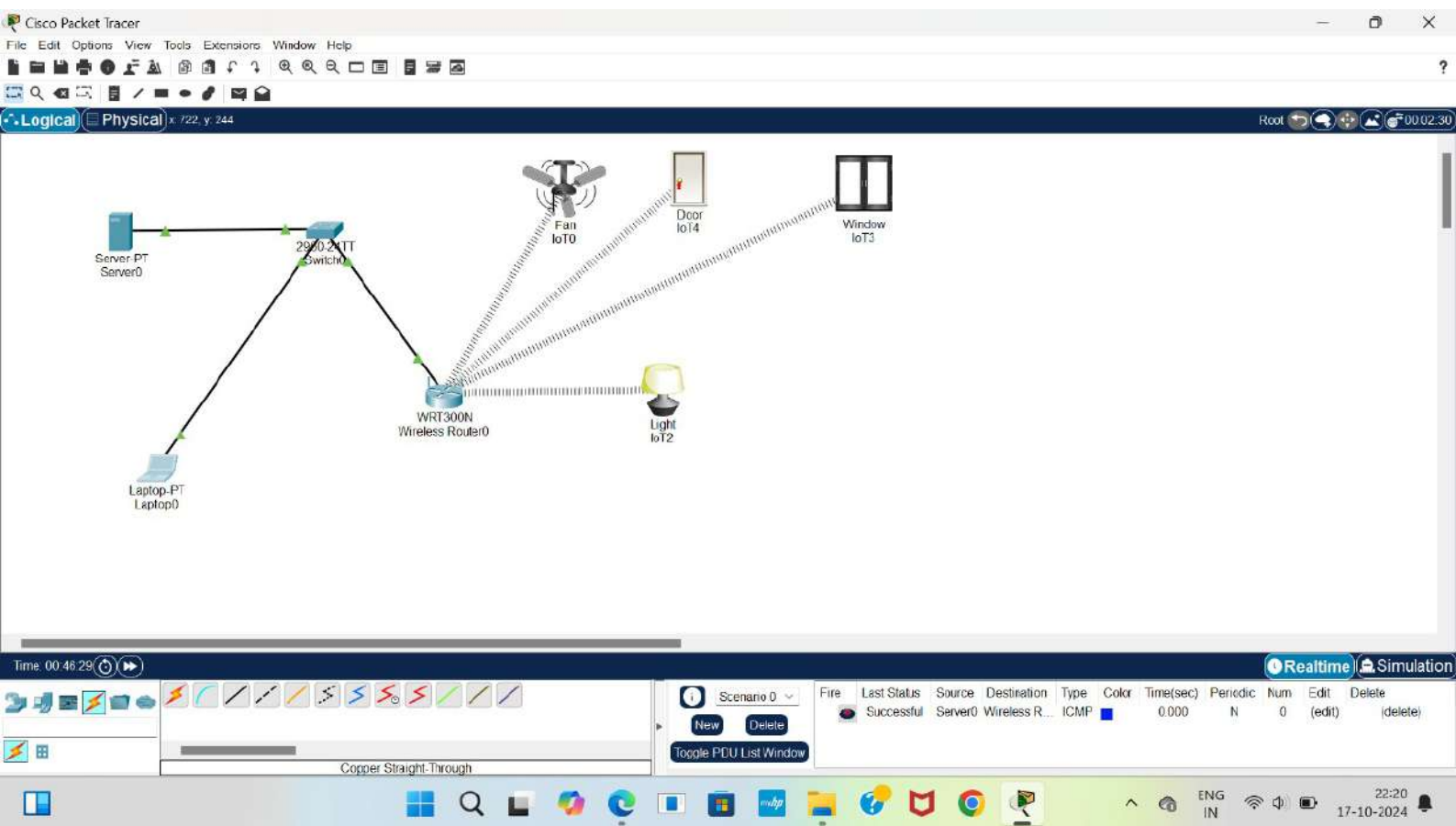
(Select a Device to Drag and Drop to the Workspace)

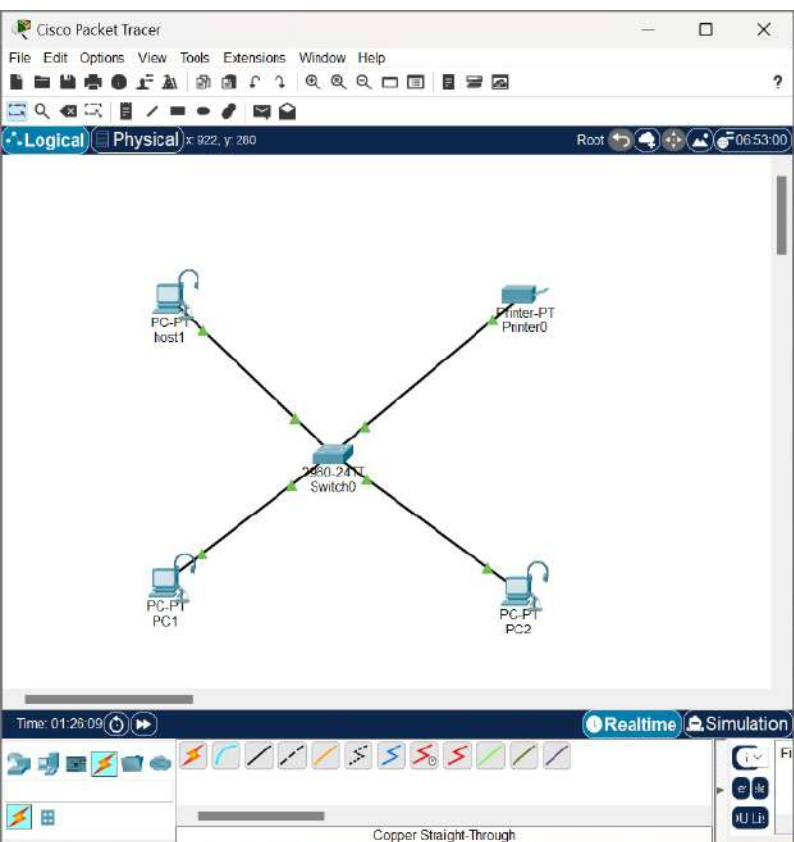
Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC0	PC2	ICMP		0.000	N	0	(edit)	(delete)





host1

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>

ping 172.16.0.2

Pinging 172.16.0.2 with 32 bytes of data:

Reply from 172.16.0.1: bytes=32 time<1ms TTL=120
Reply from 172.16.0.1: bytes=32 time<1ms TTL=120
Reply from 172.16.0.1: bytes=32 time<1ms TTL=120
Reply from 172.16.0.1: bytes=32 time<1ms TTL=120

Ping statistics for 172.16.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 1ms

C:\>ping 172.16.0.1

Pinging 172.16.0.1 with 32 bytes of data:

Reply from 172.16.0.1: bytes=32 time=3ms TTL=120
Reply from 172.16.0.1: bytes=32 time=3ms TTL=120
Reply from 172.16.0.1: bytes=32 time=3ms TTL=120
Reply from 172.16.0.1: bytes=32 time<1ms TTL=120

Ping statistics for 172.16.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 3ms

C:\>ping 172.16.0.3

Pinging 172.16.0.3 with 32 bytes of data:

Reply from 172.16.0.3: bytes=32 time<1ms TTL=120
Reply from 172.16.0.3: bytes=32 time<1ms TTL=120
Reply from 172.16.0.3: bytes=32 time<1ms TTL=120
Reply from 172.16.0.3: bytes=32 time<1ms TTL=120

Ping statistics for 172.16.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 1ms

Top
```

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical

Physical

x 983, y: 563

Root

09:39:30

```
graph TD; Router0[2811 Router0] --- Switch[2900-24TT switch]; Switch --- PC0[PC-PT PC0]; Switch --- PC1[PC-PT PC1];
```

Time: 00:19:10

Realtime Simulation

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Failed	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)
	Failed	PC1	PC0	ICMP		0.000	N	1	(edit)	(delete)
	Failed	PC0	PC1	ICMP		0.000	N	2	(edit)	(delete)
	Failed	PC1	PC0	ICMP		0.000	N	3	(edit)	(delete)

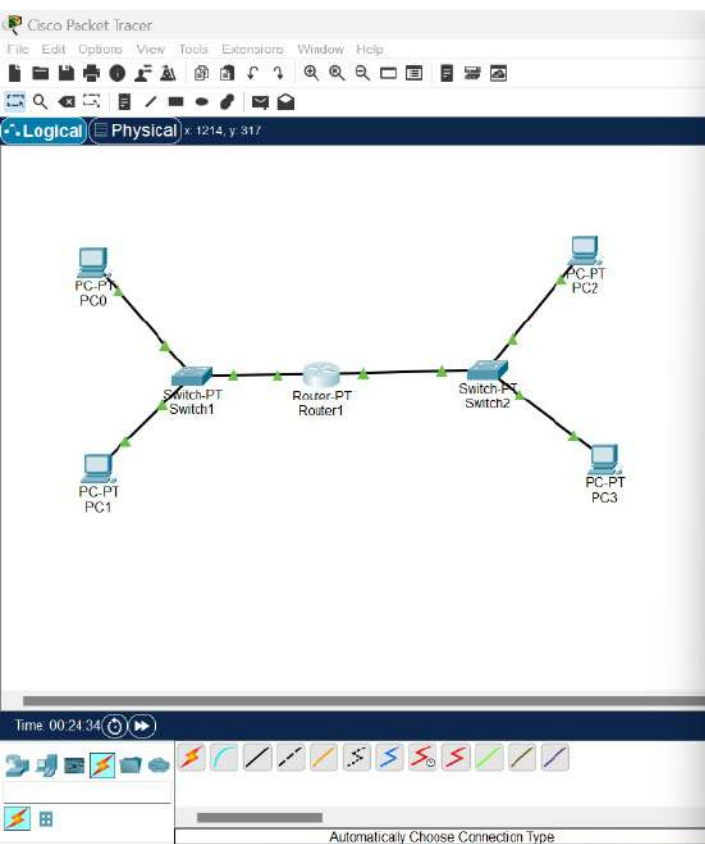
Automatically Choose Connection Type

Windows taskbar icons

ENG IN

14:23

17-10-2024



Router1

Physical Config CLI Attributes

IOS Command Line Interface

```
% Invalid input detected at '^' marker.

Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 192.168.1.3 255.255.255.0
Router(config-if)#no shutdown
^
% Invalid input detected at '^' marker.

Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit
Router(config)#
Router(config)#interface fa
% Incomplete command.
Router(config)#interface fal/0
^
% Invalid input detected at '^' marker.

Router(config)#interface fal/o
^
% Invalid input detected at '^' marker.

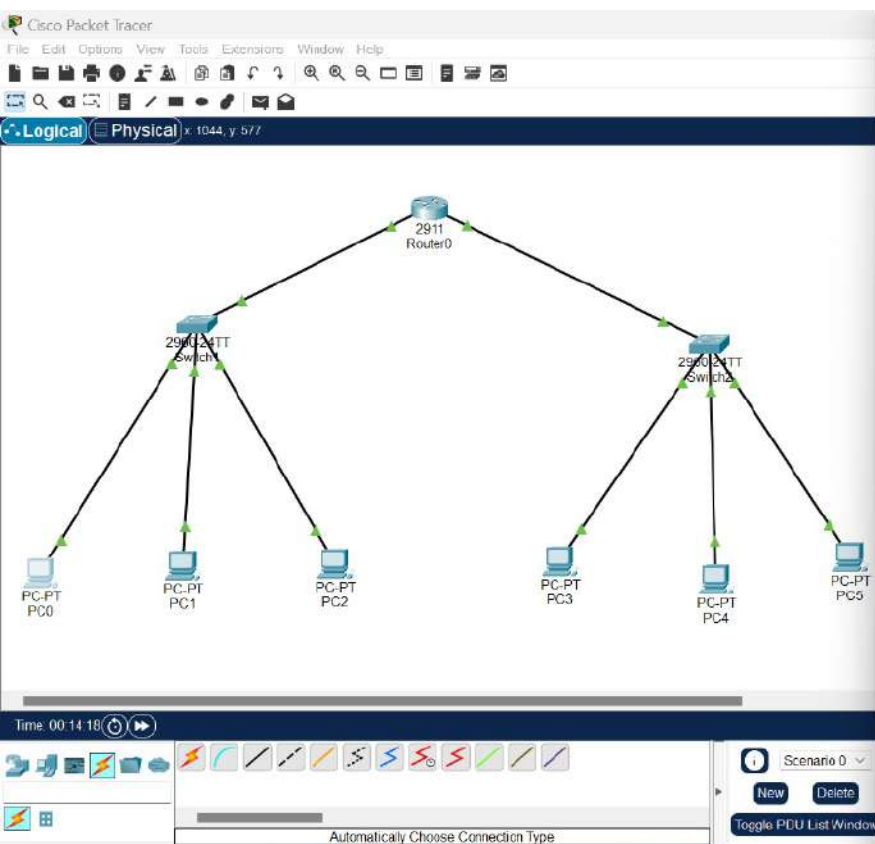
Router(config)#
Router(config)#interface fal/0
^
% Invalid input detected at '^' marker.

Router(config)#interface fal/0
Router(config-if)#ip address 192.168.2.3 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface FastEthernet1/0, changed state to up
```

Copy Paste

Top



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.131

Pinging 192.168.10.131 with 32 bytes of data:

Request timed out.
Reply from 192.168.10.131: bytes=32 time=17ms TTL=127
Reply from 192.168.10.131: bytes=32 time<1ms TTL=127
Reply from 192.168.10.131: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.10.131:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 17ms, Average = 5ms

C:\>ping 192.168.10.132

Pinging 192.168.10.132 with 32 bytes of data:

Reply from 192.168.10.132: bytes=32 time=5ms TTL=255
Reply from 192.168.10.132: bytes=32 time<1ms TTL=255
Reply from 192.168.10.132: bytes=32 time<1ms TTL=255
Reply from 192.168.10.132: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.10.132:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 1ms

C:\>
```

Top

Cisco Packet Tracer - C:\Users\syeds\Cisco Packet Tracer 8.2.2\saves\14 exp.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x 819 y 416

Root 00:01:00

```
graph TD; Router0[1941 Router0] --- Switch0[2960 24TT Switch0]; Switch0 --- PC0[PC-PT PC0]; Switch0 --- Server0[Server-PT Server0];
```

Time 00:00:02

Realtime Simulation

Scenario 0

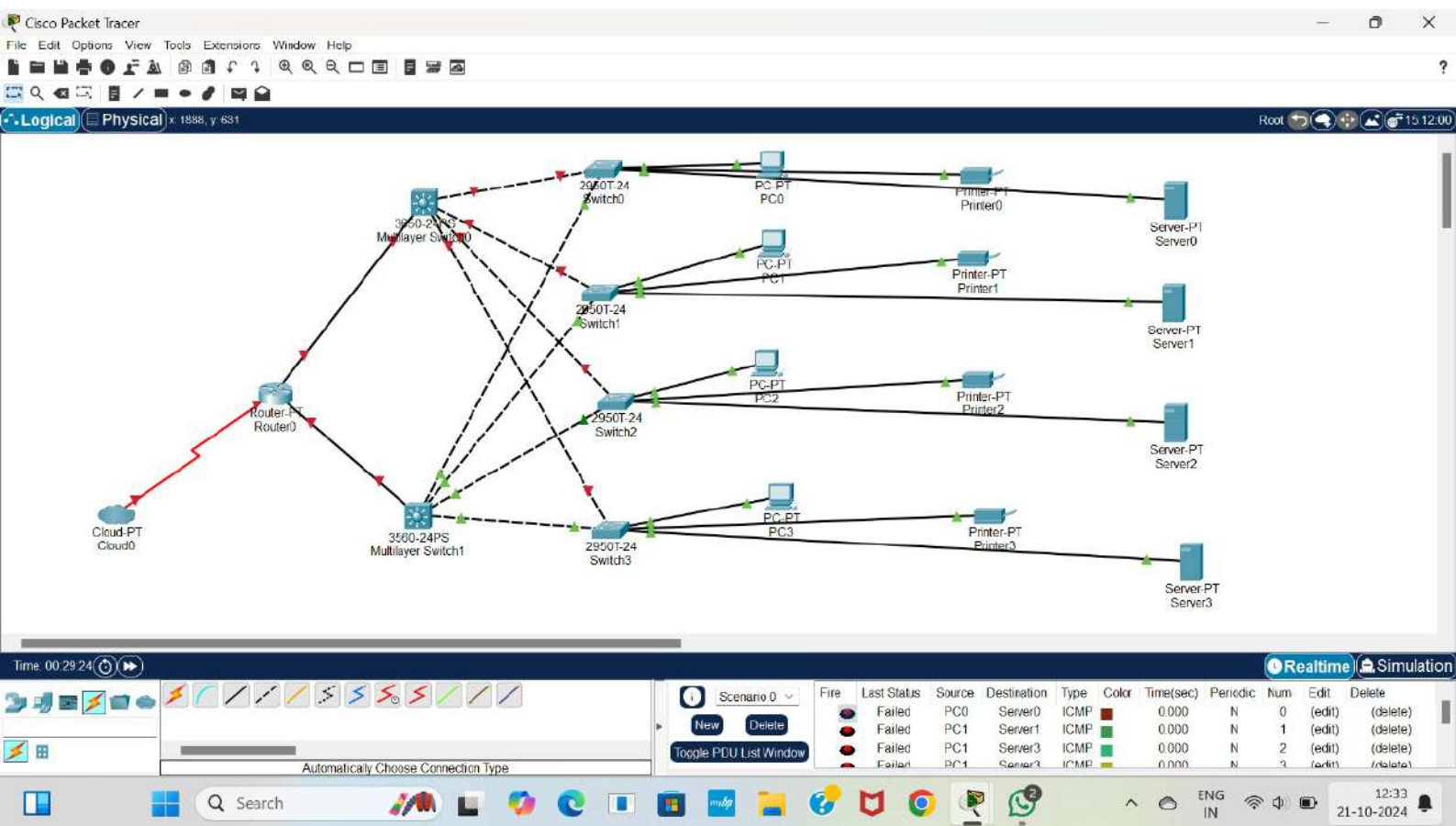
New Delete

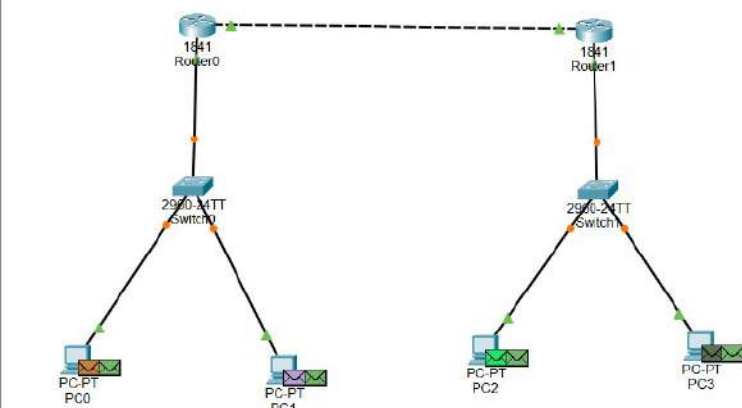
Toggle PDU List Window

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

(Select a Device to Drag and Drop to the Workspace)

ENG IN 10:50 21-10-2024





Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	—
	0.000	—
	0.000	—
	0.000	—
	0.000	—
	0.000	—
	0.000	—
	0.000	—

Reset Simulation ☒ Constant Delay Captured to: 0.000 s

Play Controls



Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:00:18.562 PLAY CONTROLS



(Select a Device to Drag and Drop to the Workspace)

Scenario 0

New Delete

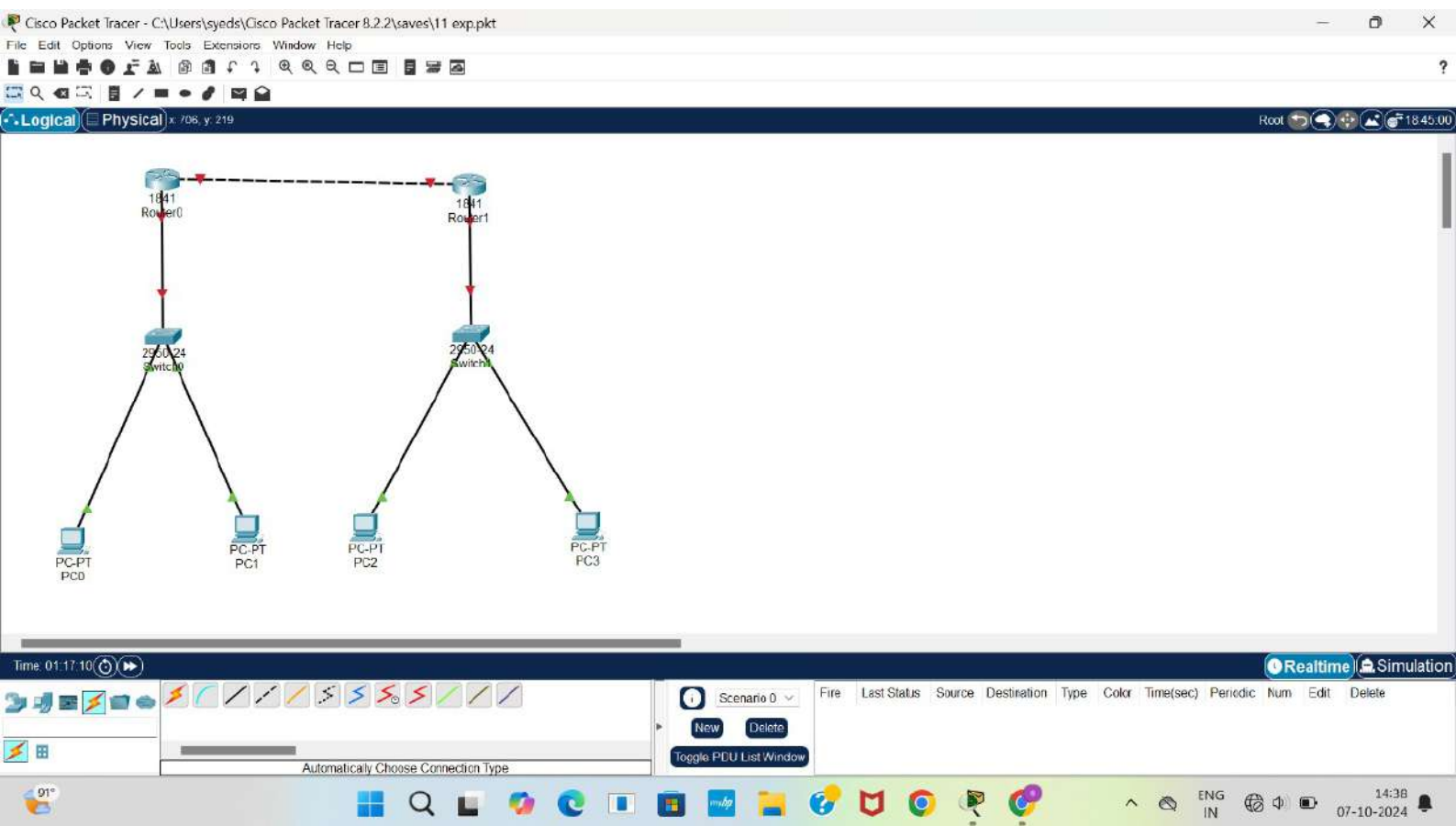
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC0	PC3	ICMP		0.000	N	0	(edit)	(delete)
	In Progress	PC1	PC3	ICMP		0.000	N	1	(edit)	(delete)
	In Progress	PC2	PC3	ICMP		0.000	N	2	(edit)	(delete)
	In Progress	PC3	PC2	ICMP		0.000	N	3	(edit)	(delete)

Event List

Realtime

Simulation

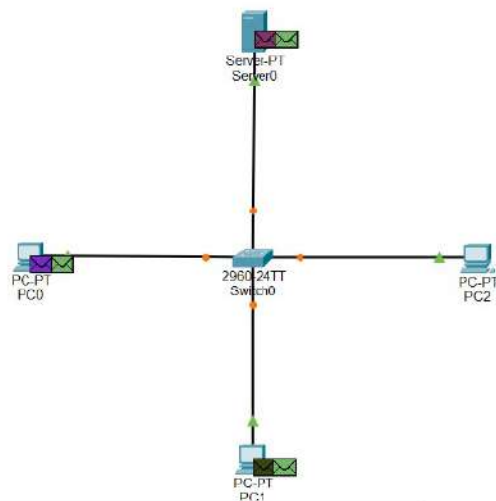


Cisco Packet Tracer - C:\Users\syeds\Cisco Packet Tracer 8.2.2\saves\exp 8.pkt

File Edit Options View Tools Extensions Window Help



Logical Physical x 951, y 432



Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.000	--
	0.000	--
	0.000	--
	0.000	--
	0.000	--

Reset Simulation ☒ Constant Delay Captured to: 0.000 s

Play Controls



Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPv2, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

Edit Filters

Show All/None

Time: 00:00:10.559



(Select a Device to Drag and Drop to the Workspace)

Scenario 0
New Delete
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	In Progress	PC0	PC2	ICMP		0.000	N	0	(edit)	(delete)
	In Progress	Server0	PC1	ICMP		0.000	N	1	(edit)	(delete)
	In Progress	PC1	Server0	ICMP		0.000	N	2	(edit)	(delete)

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical

Physical

x 1549, y 200

1941 Router0

router 0
Gig 0/0

192.168.1.1

2900 24TT Switch0

Server-PT Server0

192.169.1.10

PC-PT PC0

192.168.1.2

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type
	0.006	--	PC0	TCP
	0.006	--	PC0	TCP
	0.007	PC0	Switch0	TCP
	0.007	--	PC0	TCP
	0.008	PC0	Switch0	TCP
	0.008	Switch0	Server0	TCP
	0.008	--	PC0	TCP
	0.009	PC0	Switch0	TCP
	0.009	Switch0	Server0	TCP
	0.009	Server0	Switch0	TCP
	0.009	--	PC0	TCP
	0.010	PC0	Switch0	TCP
	0.010	Switch0	Server0	TCP
	0.010	Server0	Switch0	TCP
	0.010	Switch0	PC0	TCP
	0.010	--	PC0	TCP

Reset Simulation

☒ Constant Delay

Captured to...
150.032 s

Play Controls

Event List Filters - Visible Events

TCP

Edit Filters

Show All/None

Event List

Realtime

Simulation

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Failed	PC0	Server0	ICMP		0.000	N	0	(edit)	(delete)
	Successful	Router0	Server0	ICMP		0.000	N	1	(edit)	(delete)

Scenario 0

New

Delete

Toggle PDU List Window

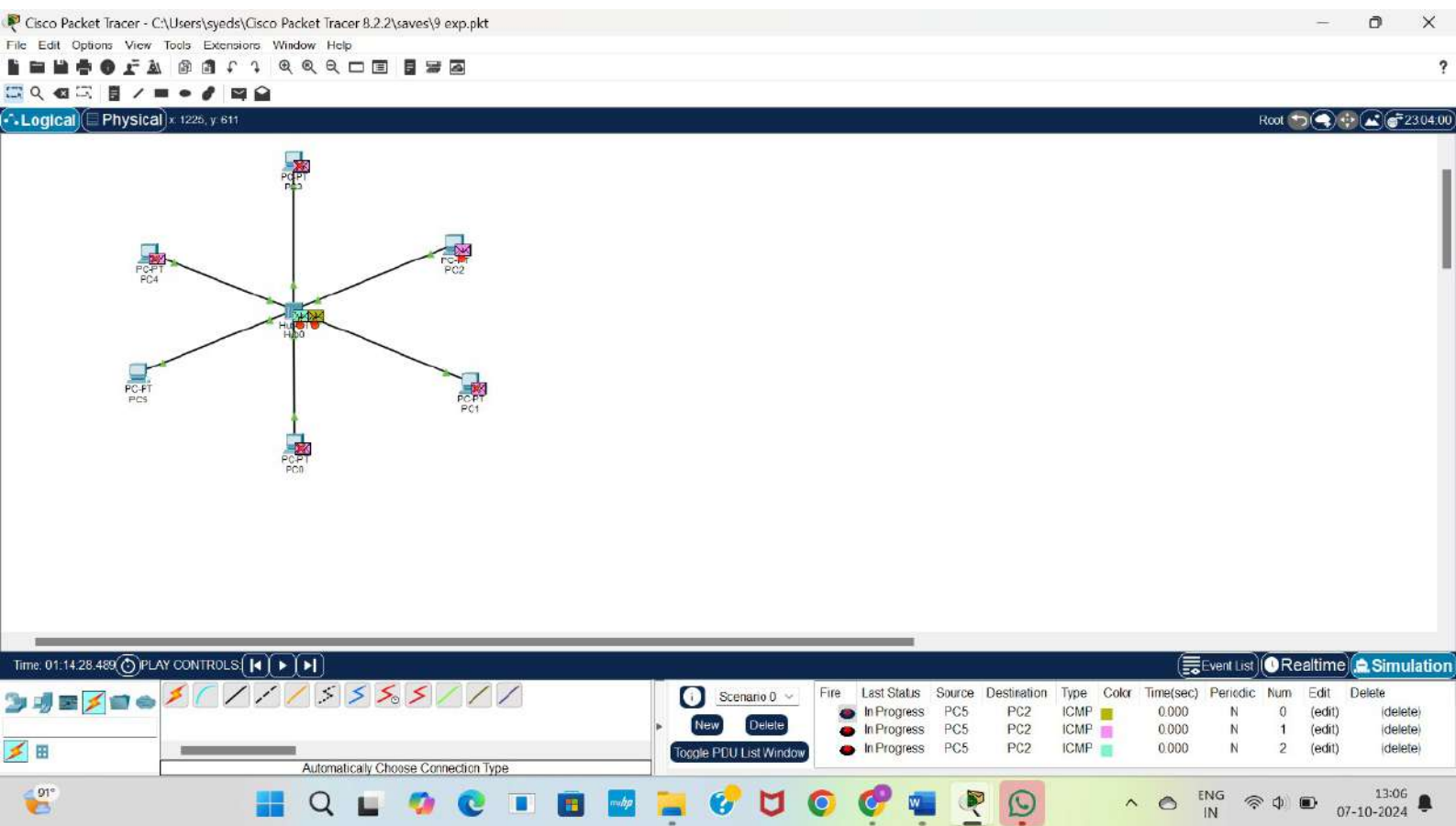
Automatically Choose Connection Type

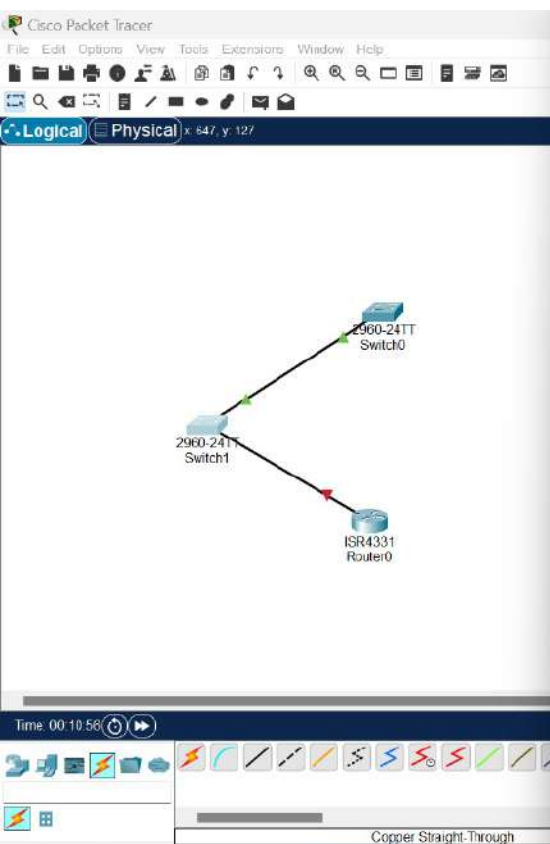
Time: 00:10:03.272

PLAY CONTROLS

13:40

14-10-2024





Switch1

Physical Config CLI Attributes

IOS Command Line Interface

Model number : WS-C2960-24TT-L
System serial number : FOC1010X104
Top Assembly Part Number : 800-27221-02
Top Assembly Revision Number : A0
Version ID : V02
CIEI Code Number : COM3L00BRA
Hardware Board Revision Number : 0x01

Switch Ports Model	SW Version	SW Image
* 1 26 WS-C2960-24TT-L	15.0(2)SE4	C2960-LANBASE9-M

Cisco IOS Software, C2960 Software (C2960-LANBASE9-M), Version 15.0(2)SE4, RELEASE SOFTWARE (fc1)
Technical Support: <http://www.cisco.com/techsupport>
Copyright (c) 1986-2013 by Cisco Systems, Inc.
Compiled Wed 26-Jun-13 02:49 by manguyen

Press RETURN to get started!

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Copy Paste

Top

Simulation

Edit Delete

13:17 07-10-2024

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 1028, y 656 Root 08:08:30

Time 00:11:52

Realtime Simulation

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
Successful	PC0	PC8	ICMP	0.000	N	0	(edit)	(delete)		
Successful	PC8	PC2	ICMP	0.000	N	1	(edit)	(delete)		
Successful	PC7	PC3	ICMP	0.000	N	2	(edit)	(delete)		
Successful	PC7	PC0	ICMP	0.000	N	3	(edit)	(delete)		

Automatically Choose Connection Type

14:10 02-10-2024

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 100% y 471

Root 08:00:30

Time 00:15:45

Realtime Simulation

Scenario 0

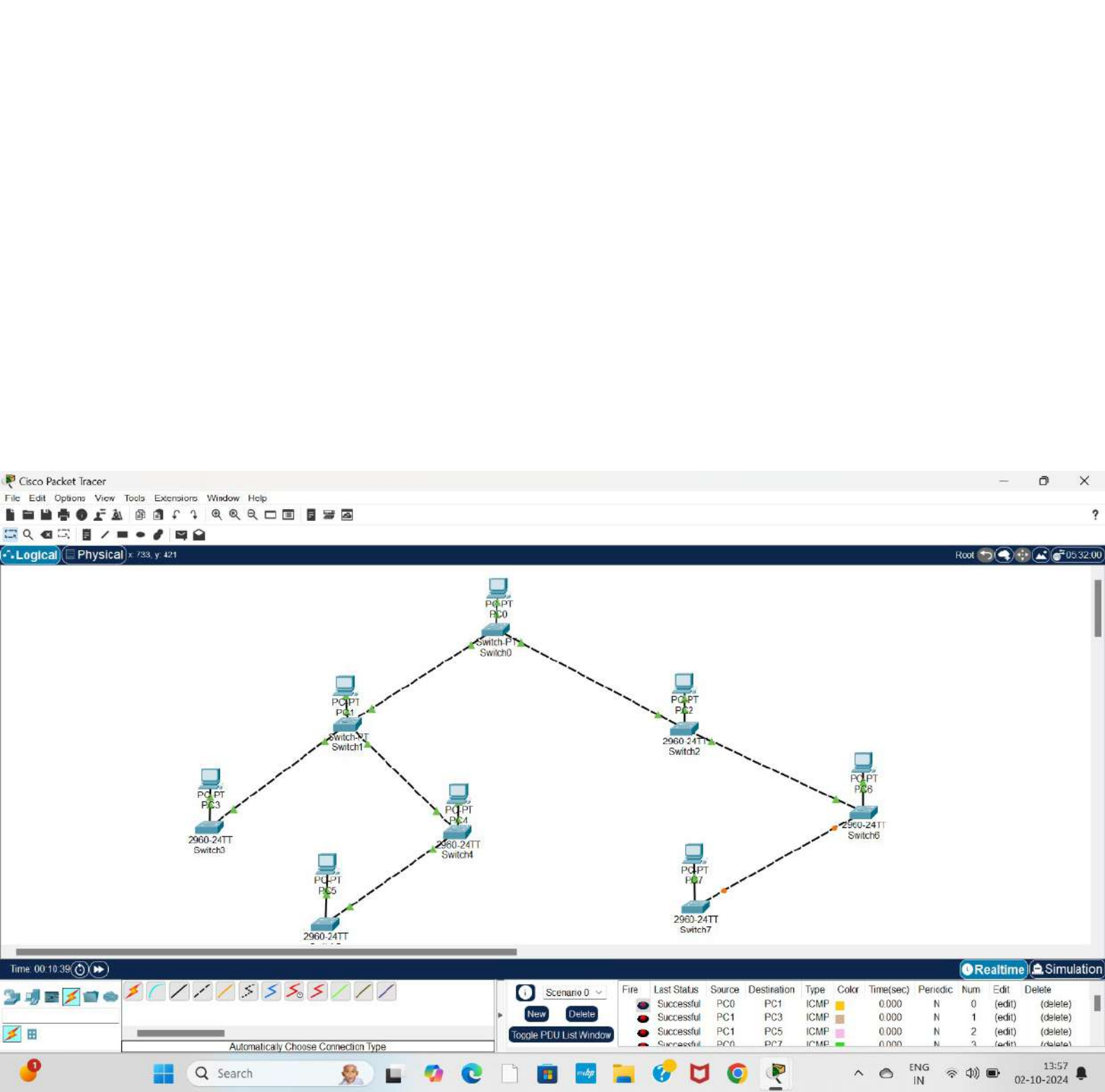
New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
●	Successful	PC0	PC3	ICMP	■	0.000	N	3	(edit)	(delete)
●	Successful	PC1	PC2	ICMP	■	0.000	N	4	(edit)	(delete)
●	Successful	PC2	PC4	ICMP	■	0.000	N	5	(edit)	(delete)

Automatically Choose Connection Type

00:22 02-10-2024



Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 1390, y 564

Root 03:45:00

Simulation Panel

Event List

Vis.	Time(sec)	Last Device
	0.000	--
	0.001	PC0
	0.001	PC2
	0.002	Switch0
	0.002	Switch2
	0.003	Switch2
	0.003	Switch3
	0.004	Switch3
	0.004	PC3
	0.005	PC3
	0.005	Switch3
	0.006	Switch3
	0.006	Switch2
	0.007	Switch2
	0.008	Switch0

Reset Simulation ☒ Constant Delay Captured to: 0.008 s

Play Controls

Event List Filters - Visible Events

ICMP

Edit Filters Show All/None

Event List Realtime Simulation

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC3	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC2	PC3	ICMP		150.021	N	1	(edit)	(delete)
	Successful	PC2	PC3	ICMP		0.000	N	2	(edit)	(delete)

Scenario 0

New Delete

Toggle PDU List Window

Automatically Choose Connection Type

Time: 00:13:39.718 PLAY CONTROLS

Windows taskbar: Search, 13:43, 02-10-2024

Cisco Packet Tracer

File Edit Options View Tools Extensions Window Help

Logical Physical x 496, y 584 Root 03:26:00

Time: 00:03:56.690 PLAY CONTROLS

Scenario 0

New Delete Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
In Progress		PC3	PC3	ICMP		0.000	N	0	(edit)	(delete)
In Progress		PC1	PC3	ICMP		0.000	N	1	(edit)	(delete)
In Progress		PC0	PC1	ICMP		0.000	N	2	(edit)	(delete)
In Progress		PC2	PC0	ICMP		0.000	N	3	(edit)	(delete)

Automatically Choose Connection Type

ENG IN 13:30 02-10-2024