

1/

```
C:\Windows\System32>ping -n 10 ps1.eu

Pinging ps1.eu [87.98.161.102] with 32 bytes of data:
Reply from 87.98.161.102: bytes=32 time=306ms TTL=47
Reply from 87.98.161.102: bytes=32 time=270ms TTL=47
Reply from 87.98.161.102: bytes=32 time=268ms TTL=47
Reply from 87.98.161.102: bytes=32 time=267ms TTL=47
Reply from 87.98.161.102: bytes=32 time=267ms TTL=47
Reply from 87.98.161.102: bytes=32 time=269ms TTL=47
Reply from 87.98.161.102: bytes=32 time=269ms TTL=47
Reply from 87.98.161.102: bytes=32 time=269ms TTL=47
Reply from 87.98.161.102: bytes=32 time=267ms TTL=47
Reply from 87.98.161.102: bytes=32 time=267ms TTL=47

Ping statistics for 87.98.161.102:
    Packets: Sent = 10, Received = 10, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 267ms, Maximum = 306ms, Average = 271ms
```

245	2021-10-24 07:13:40.327396	74.125.250.101	192.168.2.26	DTLSv1..	135	Application Data			
297	2021-10-24 07:13:40.701595	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=1/256, ttl=128	(reply in 346)	
346	2021-10-24 07:13:40.969494	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=1/256, ttl=47	(request in 297)	
449	2021-10-24 07:13:41.675752	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=2/512, ttl=128	(reply in 477)	
477	2021-10-24 07:13:41.947469	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=2/512, ttl=47	(request in 449)	
610	2021-10-24 07:13:42.691956	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=3/768, ttl=128	(reply in 656)	
656	2021-10-24 07:13:42.960706	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=3/768, ttl=47	(request in 610)	
738	2021-10-24 07:13:43.704292	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=4/1024, ttl=128	(reply in 777)	
777	2021-10-24 07:13:43.971790	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=4/1024, ttl=47	(request in 738)	
869	2021-10-24 07:13:44.989187	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=5/1280, ttl=128	(reply in 896)	
896	2021-10-24 07:13:45.989187	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=5/1280, ttl=47	(request in 869)	
1004	2021-10-24 07:13:45.732795	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=6/1536, ttl=128	(reply in 1046)	
1046	2021-10-24 07:13:46.001156	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=6/1536, ttl=47	(request in 1004)	
1147	2021-10-24 07:13:46.736644	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=7/1792, ttl=128	(reply in 1185)	
1185	2021-10-24 07:13:47.006008	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=7/1792, ttl=47	(request in 1147)	
1292	2021-10-24 07:13:47.752611	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=8/2048, ttl=128	(reply in 1352)	
1352	2021-10-24 07:13:48.022175	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=8/2048, ttl=47	(request in 1292)	
1465	2021-10-24 07:13:48.766739	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=9/2304, ttl=128	(reply in 1503)	
1503	2021-10-24 07:13:49.034141	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=9/2304, ttl=47	(request in 1465)	
1576	2021-10-24 07:13:49.771465	192.168.2.26	87.98.161.102	ICMP	74	Echo (ping) request	id=0x0001, seq=10/2560, ttl=128	(reply in 1596)	
1596	2021-10-24 07:13:50.039061	87.98.161.102	192.168.2.26	ICMP	74	Echo (ping) reply	id=0x0001, seq=10/2560, ttl=47	(request in 1576)	
250	2021-10-24 07:13:40.360151	fe80::e893:1270:4bf...ff02::1:ff00:1		ICMPv6	86	Neighbor Solicitation for fe80::1 from ec:2e:98:e2:39:db			
> Frame 1: 423 bytes on wire (3384 bits), 423 bytes captured (3384 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-CA02F98188CE}, id 0									
> Ethernet II, Src: zte.23:91:50 (38:54:9b:23:91:50), Dst: AzureNav_e2:39:db (ec:2e:98:e2:39:db)									
> Internet Protocol Version 4, Src: 74.125.250.101, Dst: 192.168.2.26									
> User Datagram Protocol, Src Port: 19305, Dst Port: 64674									
> Data (381 bytes)									

The IP address of my host is 192.168.2.26. The IP address of the destination host is 87.98.161.102.

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The ICMP packet does not have source and destination port numbers because it was designed to communicate network-layer information between hosts and routers, not between application layer processes. Each ICMP packet has a "Type" and a "Code". The Type/Code combination identifies the specific

message being received. Since the network software itself interprets all ICMP messages, no port numbers are needed to direct the ICMP message to an application layer process.

```
> Frame 297: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-...}
> Ethernet II, Src: AzureWav_e2:39:db (ec:2e:98:e2:39:db), Dst: zte_23:91:50 (38:54:9b:23:91:50)
> Internet Protocol Version 4, Src: 192.168.2.26, Dst: 87.98.161.102
< Internet Control Message Protocol
  Type: 8 (Echo (ping) request)
  Code: 0
  Checksum: 0x4d5a [correct]
  [Checksum Status: Good]
  Identifier (BE): 1 (0x0001)
  Identifier (LE): 256 (0x0100)
  Sequence Number (BE): 1 (0x0001)
  Sequence Number (LE): 256 (0x0100)
  [Response frame: 346]
> Data (32 bytes)
```

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ICMP type: 8

Code number: 0.

The ICMP packet also has checksum, identifier, sequence number, and data fields. The checksum, sequence number and identifier fields are two bytes each. (address 0x0001 -> 16bits -> 2 bytes)

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297	2021-10-24 07:13:40.701595	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=1/256, ttl=128 (reply in 346)
346	2021-10-24 07:13:40.969494	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=1/256, ttl=47 (request in 297)
449	2021-10-24 07:13:41.677572	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=2/512, ttl=128 (reply in 477)
477	2021-10-24 07:13:41.947469	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=2/512, ttl=47 (request in 449)
610	2021-10-24 07:13:42.691956	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=3/768, ttl=128 (reply in 656)
656	2021-10-24 07:13:42.960706	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=3/768, ttl=47 (request in 610)
738	2021-10-24 07:13:43.704292	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=4/1024, ttl=128 (reply in 777)
777	2021-10-24 07:13:43.971790	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=4/1024, ttl=47 (request in 738)
869	2021-10-24 07:13:44.721372	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=5/1280, ttl=128 (reply in 896)
896	2021-10-24 07:13:44.989187	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=5/1280, ttl=47 (request in 869)
1004	2021-10-24 07:13:45.732795	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=6/1536, ttl=128 (reply in 1046)
1046	2021-10-24 07:13:46.001156	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=6/1536, ttl=47 (request in 1004)
1147	2021-10-24 07:13:46.736644	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=7/1792, ttl=128 (reply in 1185)
1185	2021-10-24 07:13:47.006068	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=7/1792, ttl=47 (request in 1147)
1292	2021-10-24 07:13:47.752611	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=8/2048, ttl=128 (reply in 1352)
1352	2021-10-24 07:13:48.022175	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=8/2048, ttl=47 (request in 1292)
1465	2021-10-24 07:13:48.766739	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=9/2304, ttl=128 (reply in 1503)
1503	2021-10-24 07:13:49.034141	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=9/2304, ttl=47 (request in 1465)
1576	2021-10-24 07:13:49.771465	192.168.2.26	87.98.161.102	ICMP	74 Echo (ping) request	id=0x0001, seq=10/2560, ttl=128 (reply in 1596)
1596	2021-10-24 07:13:50.039061	87.98.161.102	192.168.2.26	ICMP	74 Echo (ping) reply	id=0x0001, seq=10/2560, ttl=47 (request in 1576)

```
> Frame 346: 74 bytes on wire (592 bits), 74 bytes captured (592 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-CA92F98188CE}, id 0
> Ethernet II, Src: zte_23:91:50 (38:54:9b:23:91:50), Dst: AzureWav_e2:39:db (ec:2e:98:e2:39:db)
> Internet Protocol Version 4, Src: 87.98.161.102, Dst: 192.168.2.26
< Internet Control Message Protocol
  Type: 0 (Echo (ping) reply)
  Code: 0
  Checksum: 0x555a [correct]
  [Checksum Status: Good]
  Identifier (BE): 1 (0x0001)
  Identifier (LE): 256 (0x0100)
  Sequence Number (BE): 1 (0x0001)
  Sequence Number (LE): 256 (0x0100)
  [Request frame: 297]
  [Response time: 267.899 ms]
> Data (32 bytes)
0020 02 1a 00 00 55 5a 00 01 00 01 61 62 63 64 65 66  ....UZ.. ..abcdef
```

ICMP type: 0

Code number: 0.

The ICMP packet also has checksum, identifier, sequence number, and data fields. The checksum, sequence number and identifier fields are two bytes each. (address 0x0001 -> 16bits -> 2 bytes)

5/

The IP address of my host is 192.168.2.26. The IP address of the destination host is 87.98.161.102.

icmp						
No.	Time	Source	Destination	Protocol	Length	Info
275	2021-10-24 07:29:21.429452	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=11/2816, ttl=1 (no response found!)
276	2021-10-24 07:29:21.431304	192.168.2.26	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
278	2021-10-24 07:29:21.431970	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=12/3072, ttl=1 (no response found!)
279	2021-10-24 07:29:21.434333	192.168.2.26	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
280	2021-10-24 07:29:21.435004	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=13/3328, ttl=1 (no response found!)
281	2021-10-24 07:29:21.436976	192.168.2.26	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
444	2021-10-24 07:29:22.486915	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=14/3584, ttl=2 (no response found!)
446	2021-10-24 07:29:22.489477	192.168.1.1	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
447	2021-10-24 07:29:22.490313	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=15/3840, ttl=2 (no response found!)
449	2021-10-24 07:29:22.492927	192.168.1.1	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
450	2021-10-24 07:29:22.493527	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=16/4096, ttl=2 (no response found!)
451	2021-10-24 07:29:22.495434	192.168.1.1	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)
634	2021-10-24 07:29:23.545255	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=17/4352, ttl=3 (no response found!)
637	2021-10-24 07:29:23.554612	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
638	2021-10-24 07:29:23.555316	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=18/4608, ttl=3 (no response found!)
640	2021-10-24 07:29:23.562348	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
641	2021-10-24 07:29:23.563891	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=19/4864, ttl=3 (no response found!)
642	2021-10-24 07:29:23.569943	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
3560	2021-10-24 07:29:40.610702	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=20/5120, ttl=4 (no response found!)
3565	2021-10-24 07:29:40.611251	172.16.44.0	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
3566	2021-10-24 07:29:40.632107	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=21/5376, ttl=4 (no response found!)
3569	2021-10-24 07:29:40.644896	172.16.44.8	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)

> Frame 275: 106 bytes on wire (848 bits), 106 bytes captured (848 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-CA92F98188CE}, id 0

> Ethernet II, Src: AzureWav_e2:39:db (ec:2e:98:e2:39:db), Dst: zte_23:91:50 (38:54:9b:23:91:50)

> Internet Protocol Version 4, Src: 192.168.2.26, Dst: 87.98.161.102

> Internet Control Message Protocol

Type: 8 (Echo (ping) request)

Code: 0

Checksum: 0xf7f3 [correct]

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644	2021-10-24 07:29:23.569943	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)
3560	2021-10-24 07:29:40.610702	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=20/5120, ttl=4 (no response found!)

> Frame 275: 106 bytes on wire (848 bits), 106 bytes captured (848 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-CA92F98188CE}, id 0

> Ethernet II, Src: AzureWav_e2:39:db (ec:2e:98:e2:39:db), Dst: zte_23:91:50 (38:54:9b:23:91:50)

> Internet Protocol Version 4, Src: 192.168.2.26, Dst: 87.98.161.102

> Internet Control Message Protocol

0100 = Version: 4

.... 0101 = Header Length: 20 bytes (5)

> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)

Total Length: 92

Identification: 0x2d06 (11526)

> Flags: 0x00

Fragment Offset: 0

> Time to Live: 1

Protocol: ICMP (1)

Header Checksum: 0xd110 [validation disabled]

[Header checksum status: Unverified]

Source Address: 192.168.2.26

Destination Address: 87.98.161.102

> Internet Control Message Protocol

0010 00 5c 2d 06 00 00 01 01 d1 10 c0 a8 02 1a 57 62 .\-----..wb

No. If ICMP sent UDP packets instead, the IP protocol number should be 0x11

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The ICMP echo packet has the same fields as the ping query packets.

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281 2021-10-24 07:29:21.436976 192.168.2.253 192.168.2.26 ICMP 134 Time-to-live exceeded (Time to live exceeded in transit)
444 2021-10-24 07:29:22.486915 192.168.2.26 87.98.161.102 ICMP 106 Echo (ping) request id=0x0001, seq=14/3584, ttl=2 (no response found!)
> Frame 275: 106 bytes on wire (848 bits), 106 bytes captured (848 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-CA92F98188CE}, id 0
> Ethernet II, Src: AzureWav_e2:39:db (ec:2e:98:e2:39:db), Dst: zte_23:91:50 (38:54:9b:23:91:50)
> Internet Protocol Version 4, Src: 192.168.2.26, Dst: 87.98.161.102
0100 .... = Version: 4
.... 0101 = Header Length: 20 bytes (5)
> Differentiated Services Field: 0x00 (DSCP: CS0, ECN: Not-ECT)
Total Length: 92
Identification: 0x2d06 (11526)
Flags: 0x00
Fragment Offset: 0
> Time to Live: 1
Protocol: ICMP (1)
Header Checksum: 0xd110 [validation disabled]
[Header checksum status: Unverified]
Source Address: 192.168.2.26
Destination Address: 87.98.161.102
> Internet Control Message Protocol
Type: 8 (Echo (ping) request)
Code: 0
Checksum: 0xf7f3 [correct]
[Checksum Status: Good]
Identifier (BE): 1 (0x0001)
Identifier (LE): 256 (0x0100)
Sequence Number (BE): 11 (0x000b)
Sequence Number (LE): 2816 (0x0b00)
> [No response seen]
> Data (64 bytes)
0010 00 5c 2d 06 00 00 01 01 d1 10 c0 a8 02 1a 57 62 -\-----wb

```

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icmp							
No.	Time	Source	Destination	Protocol	Length	Info	
275	2021-10-24 07:29:21.429452	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=11/2816, ttl=1 (no response found!)	
276	2021-10-24 07:29:21.431304	192.168.2.253	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)	
278	2021-10-24 07:29:21.431970	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=12/3072, ttl=1 (no response found!)	
279	2021-10-24 07:29:21.434333	192.168.2.253	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)	
280	2021-10-24 07:29:21.435004	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=13/3328, ttl=1 (no response found!)	
281	2021-10-24 07:29:21.436976	192.168.2.253	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)	
444	2021-10-24 07:29:22.486915	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=14/3584, ttl=2 (no response found!)	
446	2021-10-24 07:29:22.489477	192.168.1.1	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)	
447	2021-10-24 07:29:22.490313	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=15/3840, ttl=2 (no response found!)	
449	2021-10-24 07:29:22.492927	192.168.1.1	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)	
450	2021-10-24 07:29:22.493527	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=16/4096, ttl=2 (no response found!)	
451	2021-10-24 07:29:22.495434	192.168.1.1	192.168.2.26	ICMP	134	Time-to-live exceeded (Time to live exceeded in transit)	
634	2021-10-24 07:29:23.545255	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=17/4352, ttl=3 (no response found!)	
637	2021-10-24 07:29:23.554612	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)	
638	2021-10-24 07:29:23.555316	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=18/4608, ttl=3 (no response found!)	
640	2021-10-24 07:29:23.562348	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)	
641	2021-10-24 07:29:23.563991	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=19/4864, ttl=3 (no response found!)	
644	2021-10-24 07:29:23.569943	100.94.0.2	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)	
3560	2021-10-24 07:29:40.610702	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=20/5120, ttl=4 (no response found!)	
3565	2021-10-24 07:29:40.631251	172.16.44.8	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)	
3566	2021-10-24 07:29:40.632107	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=21/5376, ttl=4 (no response found!)	
3569	2021-10-24 07:29:40.644896	172.16.44.8	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)	
3570	2021-10-24 07:29:40.645589	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=22/5632, ttl=4 (no response found!)	
3573	2021-10-24 07:29:40.653722	172.16.44.8	192.168.2.26	ICMP	70	Time-to-live exceeded (Time to live exceeded in transit)	
3709	2021-10-24 07:29:41.688537	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=23/5888, ttl=5 (no response found!)	

> Frame 276: 134 bytes on wire (1072 bits), 134 bytes captured (1072 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AABB-CA92F98188CE}, id 0

> Ethernet II, Src: zte_23:91:50 (38:54:9b:23:91:50), Dst: AzureWav_e2:39:db (ec:2e:98:e2:39:db)

> Internet Protocol Version 4, Src: 192.168.2.253, Dst: 192.168.2.26

> Internet Control Message Protocol

Type: 11 (Time-to-live exceeded)
Code: 0 (Time to live exceeded in transit)
Checksum: 0xf4ff [correct]
[Checksum Status: Good]
Unused: 00000000

> Internet Protocol Version 4, Src: 192.168.2.26, Dst: 87.98.161.102

> Internet Control Message Protocol

The ICMP error packet is not the same as the ping query packets. It contains both the IP header and the first 8 bytes of the original ICMP packet that the error is for.

9/

No.	Time	Source	Destination	Protocol	Length	Info
19095	2021-10-24 07:31:11.897700	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=74/18944, ttl=22 (reply in 19146)
19146	2021-10-24 07:31:12.166798	87.98.161.102	192.168.2.26	ICMP	106	Echo (ping) reply id=0x0001, seq=74/18944, ttl=47 (request in 19095)
19147	2021-10-24 07:31:12.167658	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=75/19200, ttl=22 (reply in 19192)
19192	2021-10-24 07:31:12.437418	87.98.161.102	192.168.2.26	ICMP	106	Echo (ping) reply id=0x0001, seq=75/19200, ttl=47 (request in 19147)
19193	2021-10-24 07:31:12.438415	192.168.2.26	87.98.161.102	ICMP	106	Echo (ping) request id=0x0001, seq=76/19456, ttl=22 (reply in 19251)
19251	2021-10-24 07:31:12.709231	87.98.161.102	192.168.2.26	ICMP	106	Echo (ping) reply id=0x0001, seq=76/19456, ttl=47 (request in 19193)

> Frame 19251: 106 bytes on wire (848 bits), 106 bytes captured (848 bits) on interface \Device\NPF_{40E7C437-FDEB-42FA-AA8B-CA92F98188CE}, id 0

> Ethernet II, Src: zte_23:91:50 (38:54:9b:23:91:50), Dst: AzureWav_e2:39:db (ec:2e:98:e2:39:db)

> Internet Protocol Version 4, Src: 87.98.161.102, Dst: 192.168.2.26

> Internet Control Message Protocol

Type: 0 (Echo (ping) reply)

Code: 0

Checksum: 0xffb2 [correct]

[Checksum Status: Good]

Identifier (BE): 1 (0x0001)

Identifier (LE): 256 (0x0100)

Sequence Number (BE): 76 (0x004c)

Sequence Number (LE): 19456 (0x4c00)

[Request frame: 19193]

[Response time: 270.816 ms]

> Data (64 bytes)

The last three ICMP packets are message type 0 (echo reply) rather than 11 (TTL expired). They are different because the datagrams have made it all the way to the destination host before the TTL expired.

10/

```
Administrator: Command Prompt

Tracing route to psl.eu [87.98.161.102]
over a maximum of 30 hops:

  0  1    2 ms    2 ms    2 ms    192.168.2.253 [192.168.2.253]
  1  2    2 ms    2 ms    1 ms    192.168.1.1 [192.168.1.1]
  2  3    9 ms    7 ms    6 ms    100.94.0.2
  3  4   20 ms   12 ms    8 ms    172.16.44.8 [172.16.44.8]
  4  5   13 ms   14 ms   14 ms    172.16.92.1 [172.16.92.1]
  5  6    *      *      *      Request timed out.
  6  7   12 ms    *     16 ms    172.16.93.73 [172.16.93.73]
  7  8   17 ms   14 ms   14 ms    10.255.10.77 [10.255.10.77]
  8  9   63 ms   61 ms   61 ms    NMHung2611 [27.68.250.248]
  9 10   61 ms   62 ms   60 ms    xe-3-1-3-xcr2.sgs.cw.net [203.169.56.25]
 10 11  215 ms  217 ms  216 ms    ae9-xcr1.sng.cw.net [195.2.24.165]
 11 12  204 ms  205 ms  203 ms    ae34-xcr1.mrx.cw.net [195.2.2.57]
 12 13  216 ms  215 ms  216 ms    ae5-xcr3.prp.cw.net [195.2.25.17]
 13 14    *      *      *      Request timed out.
 14 15  265 ms  266 ms  266 ms    be105.par-gsw-sbb1-nc5.fr.eu [94.23.122.245]
 15 16    *      *      *      Request timed out.
 16 17  265 ms  270 ms  268 ms    be105.par-gsw-sbb1-nc5.fr.eu [94.23.122.245]
 17 18  272 ms  272 ms  270 ms    be103.rbx-g4-nc5.fr.eu [54.36.50.229]
 18 19    *      *      *      Request timed out.
 19 20    *      *      *      Request timed out.
 20 21    *      *      *      Request timed out.
 21 22  269 ms  269 ms  270 ms    ip102.ip-87-98-161.eu [87.98.161.102]

Trace complete.

C:\Windows\System32>
```

There is a link between steps 10 and 11 that has a significantly longer delay.

