# ICMP Packets - Baseline Analysis Exercise

**Q-1:** How many total ICMP Echo Request and ICMP Echo Reply packets for Windows machine?

**Answer:**

ICMP Echo Request =20

ICMP Echo Response =20

**Q-2:** How many total ICMP Echo Request and ICMP Echo Reply packets for Linux (Ubuntu) machine?

**Answer:**

ICMP Echo Request =20

ICMP Echo Response =20

**Q-3:** Does the counting of total ICMP Request and ICMP Reply packets differ for Windows and Linux? If NO, explain why?

**Answer: The protocol has the same rules in windows and Linux operating systems**

**Q-4:** What are the Minimum, Maximum and Common/Average Size (Length) of ICMP Request and ICMP Reply packets for Windows machine?

**Answer:**

Minimum Size of ICMP Request =74 Bytes

Maximum Size of ICMP Request =74 Bytes

Common Size of ICMP Request =74 Bytes

Minimum Size of ICMP Reply =74 Bytes

Maximum Size of ICMP Reply =74 Bytes

Common Size of ICMP Reply =74 Bytes

**Q-5:** What are the Minimum, Maximum and Common/Average Size (Length) of ICMP Request and ICMP Reply packets for Linux machine?

**Answer:**

Minimum Size of ICMP Request =98 Bytes

Maximum Size of ICMP Request =98 Bytes

Common Size of ICMP Request =98 Bytes

Minimum Size of ICMP Reply =98 Bytes

Maximum Size of ICMP Reply =98 Bytes

Common Size of ICMP Reply =98 Bytes

**Q-6:** Why the same ICMP Request and ICMP Reply packet have different size for Linux and Windows machine?

**Answer:Compared with Windows data package, Linux data package：**

**The Head has an additional 8-byte timestamp and the Data part has an additional 16 bytes.**

**Q-7:** Did you find any Data in ICMP Request and ICMP Reply packets for Windows machine? If yes, then write the common Size of Data and common Value of Data (abbreviated) for ICMP Request and ICMP Reply packets.

**Answer:**

Common Size of Data for ICMP Request =32Bytes

Common Value of Data (abbreviated) for ICMP Request=

6162636465666768696a6b6c6d6e6f7071727374757677616263646566676869(16)

Common Size of Data for ICMP Reply =32Bytes

Common Value of Data (abbreviated) for ICMP Reply =

6162636465666768696a6b6c6d6e6f7071727374757677616263646566676869(16)

**Q-8:** Did you find any Data in ICMP Request and ICMP Reply packets for Linux machine? If yes, then write the common Size of Data and common Value of Data (abbreviated) for ICMP Request and ICMP Reply packets.

**Answer:**

Common Size of Data for ICMP Request =48 Bytes

Common Value of Data (abbreviated) for ICMP Request=

6ae8030000000000101112131415161718191a1b1c1d1e1f202122232425262728292a2b2c2d2e2f3031323334353637(16)

Common Size of Data for ICMP Reply =48 Bytes

Common Value of Data (abbreviated) for ICMP Reply =

6ae8030000000000101112131415161718191a1b1c1d1e1f202122232425262728292a2b2c2d2e2f3031323334353637(16)

**Q-9:** Write the most common TYPE and CODE numbers and their descriptions of collected ICMP Request and ICMP Reply packets for Windows machine.

**Answer:**

ICMP Request TYPE=**8**

Description of ICMP Request TYPE= **(Echo (ping) request)**

ICMP Reply CODE=**0**

Description of ICMP Reply CODE= **(Echo (ping) reply)**

**Q-10:** Write the most common TYPE and CODE numbers and their descriptions of collected ICMP Request and ICMP Reply packets for Linux machine.

**Answer:**

ICMP Request TYPE=**8**

Description of ICMP Request TYPE= **(Echo (ping) request)**

ICMP Reply CODE=**0**

Description of ICMP Reply CODE= **(Echo (ping) reply)**