

# CS3205 A4 Report - ICMP Ping

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ping mit.edu -c 10

1.
  - a. IP address of source Host: 172.20.10.3
  - b. IP address of destination Host: 23.58.23.102
2. ICMP packets are designed to communicate network-layer information between hosts and routers (and not between application layer processes). Hence they do not need source and destination port numbers. Since the network software itself interprets all ICMP messages, no port numbers are needed to direct the ICMP message to an application layer process.
3. ICMP ping request packet  
(screenshot at ICMP\_ping\_3)
  - a. ICMP type = 8 (echo (ping) request)
  - b. ICMP code = 0
  - c. The other fields in the ICMP packet are checksum (2 bytes), identifier BE (2 bytes), identifier LE (2 bytes), sequence number BE (2 bytes), sequence number LE (2 bytes), data and timestamp.
4. ICMP ping reply packet  
(screenshot at ICMP\_ping\_4)
  - a. ICMP type = 0
  - b. ICMP code = 0
  - c. The other fields in the ICMP packet are checksum (2 bytes), identifier BE (2 bytes), identifier LE (2 bytes), sequence number BE (2 bytes), sequence number LE (2 bytes), data and timestamp.