

MINI QUIZ: BINARY CONVERSION OF A TCP HEADER

When sending data across networks, computers need to be able to parse data and agree upon its meaning. Give two examples of metadata used in a TCP Header and describe how they facilitate this goal.

Why does the TCP specification dictate the endianness of values found in the header? Could endianness have been encoded in the header rather than the protocol? How would you do so?

Answer the following questions about the following hex data, which represents the first 20 bytes of a TCP header.

`0xaf00bc06441e7368eff2a00281ff5600`

Identify these fields:

- Sequence Number:
- Acknowledgement Number:
- Source Port:
- Destination Port:

What is the length of the TCP header? and did it contain optional fields?