

Homework 2

Assigned: Sept. 17, 2015

Due: Sept. 24, 2015

1. Compress the following IPv6 header using 6LoWPAN by giving the decimal value of each byte. Assume that it uses link local source and destination addresses, the hop limit is 8, traffic and flow label are both 0, the next header is UDP (which is not compressed).
2. Read RFC 4944 and answer the following question. Assume the UDP header of the previous problem has source port = 61621, destination port = 61630, and checksum = 62050 and the length can be calculated based on other fields. Show the decimal value of each byte of both IP and UDP headers when they are compressed.
3. How does 6LoWPAN implement the mesh routing under IP topology and provide MTU of 1280 bytes for IPv6?
4. In ITU G.hn, how are nodes connected to different media organized? How do they communicate with each other?