Data Packet Structure

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How do packets work over the Internet?

Everything that we do on the Internet is done in packets. This means every webpage that we visit comes as a series of packets, and every email we send to someone leaves our computers as a series of packets.
Networks like Wifi and Intenet that receive data in small packets are called packet-switched networks.

Why is data divided into packets?

Because it makes the network more efficient. It allows the network to balance the load across various pieces of equipments on milliseconds basis. If equipments are busy or malfunctioning their packets can change route to reach as soon as possible.

What is packet structure?

The structure of the network packet consists of three parts; header, payload and trailer. The header includes instructions about the data carried by the packet. The payload is the body of the packet, which is actual data that packet is delivering to the destination. Finally, the trailer contains a couple of bits that tell the receiving device that it has reached the end of packet.

Example email packet diagram:

Header	Sender's IP address Receiver IP address Protocol Packet number	96 bits
Payload	Actual Data	896 bits
Trailer	Data to show end of packet Error correction	32 bits.