Bytes
And Pieces
The Transmission Control Protocol and Internet Protocol, or TCP/IP, set the standard for how computers communicate over the Internet, like sending e-mail or browsing the Web.

TCP/IP in action: Browsing the Web

1. When a Web server receives a request for a Web page, the server passes the requested page along to its TCP/IP software for processing.
2. The TCP software breaks the information down into datagrams, smaller individual packets of data, for easier transmission.
3. The IP software places the individual packets in digital "envelopes" that are imprinted with the Web user's address, along with the server's information.
4. Routers within the Internet scan the envelopes to determine how best to deliver them to their destination.
5. When the datagrams begin arriving at the Web user's computer, IP software makes sure that they are intact and passes them along to the TCP software.
6. The TCP software then pieces together the datagrams, making sure they are all accounted for and in the correct order. While it is doing this, the Web page is fed to the Web user to be displayed.

Source: Steve Gibb, assistant professor of computer science, University of Washington

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