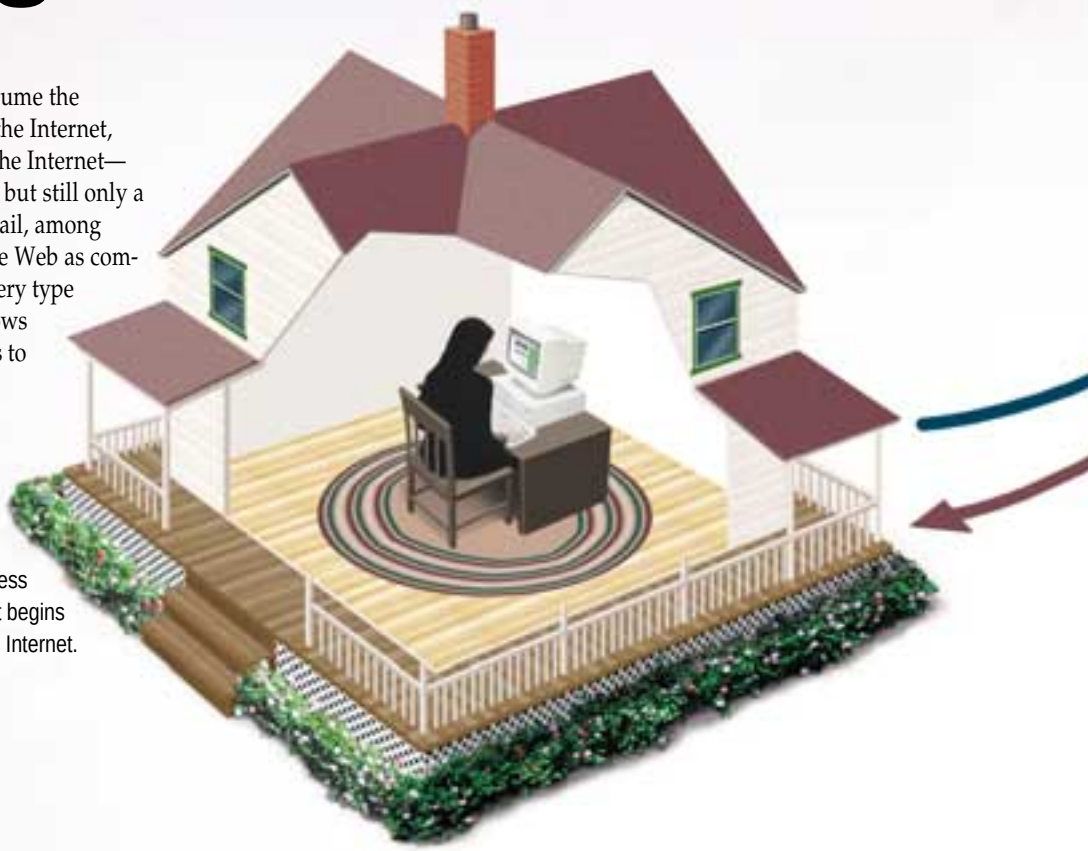
How Information Travels Through The Web

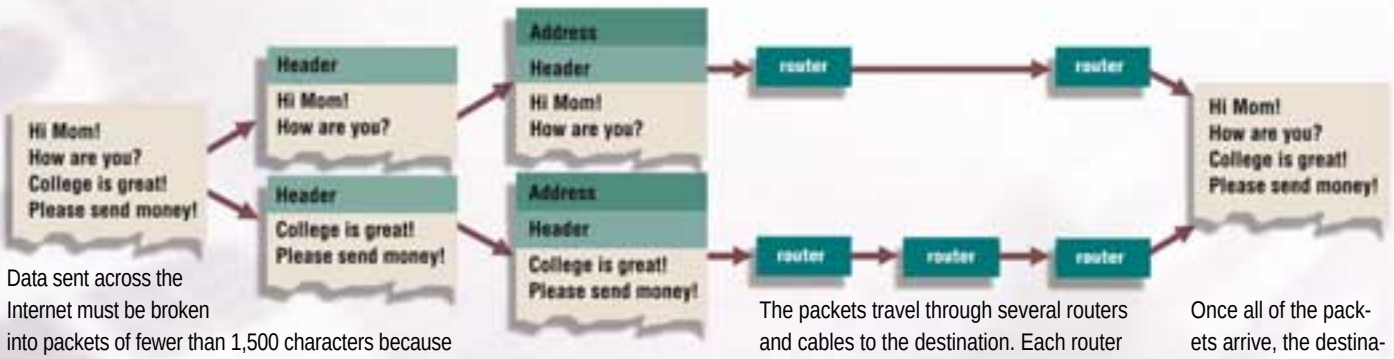
While many people assume the World Wide Web is the Internet, it's actually only a part of the Internet—an extremely popular part, but still only a part. Newsgroups and e-mail, among other forms of data, join the Web as components of the Internet. Every type of component, though, follows similar protocols and routes to deliver your data.



1 When you open your Web browser, type a Web address, and press ENTER, your request begins its journey across the Internet.

TCP/IP

TCP/IP is the protocol used to send data across the Internet. TCP (Transmission Control Protocol) is the method by which the data is broken into packets. IP (Internet Protocol) is the method by which the packets are sent until they reach the destination computer.



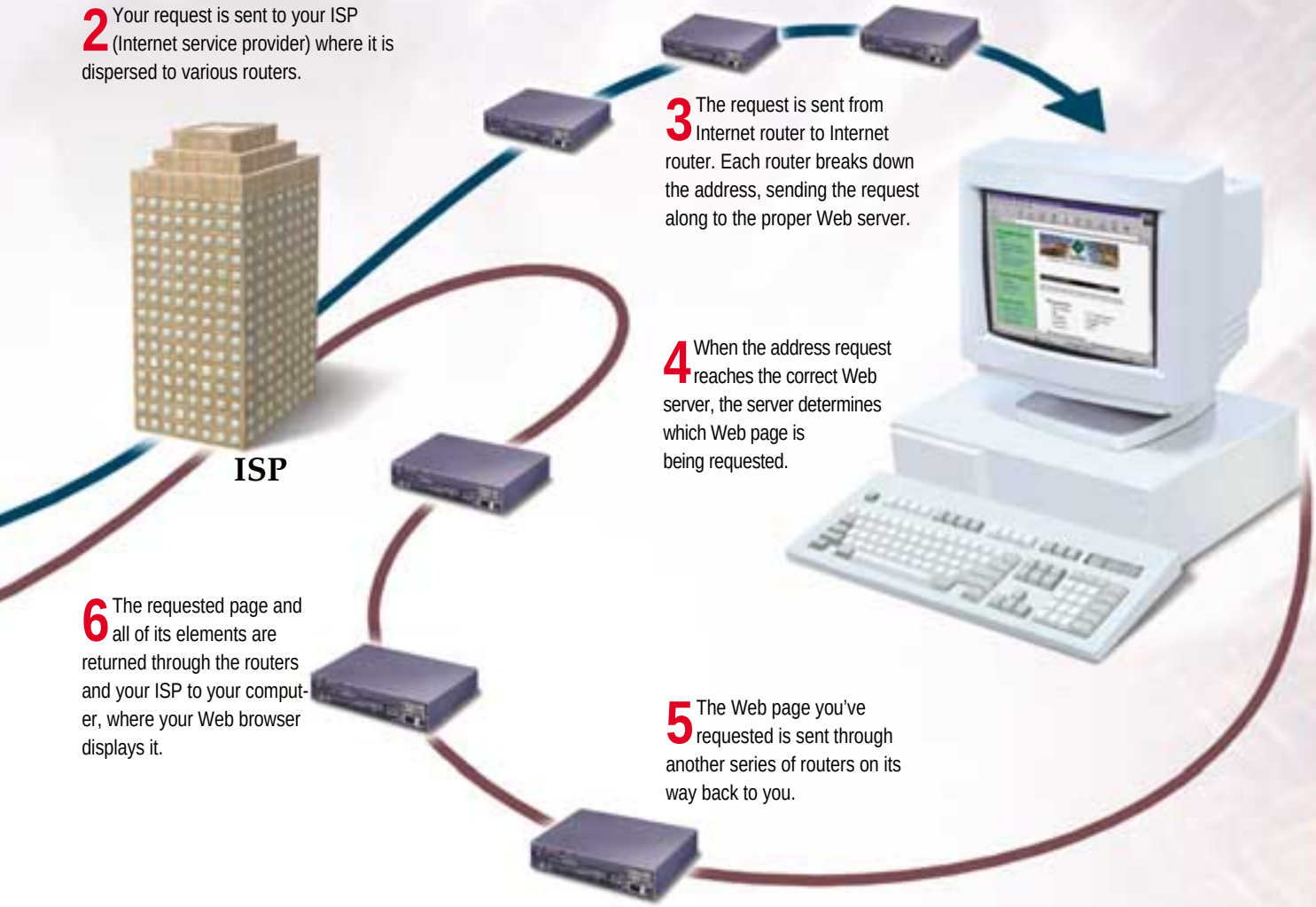
Data sent across the Internet must be broken into packets of fewer than 1,500 characters because of hardware limitations. TCP is the process used to create the packets. Each packet is labeled with a header, allowing the complete document to be reassembled properly once it reaches its destination.

Each packet is then labeled with the destination address, using IP.

The packets travel through several routers and cables to the destination. Each router checks the address of the packet before sending it along. If Internet traffic is heavy, the packets may travel different routes and/or arrive at different times.

Once all of the packets arrive, the destination computer uses TCP to reassemble the packets in the correct order.

2 Your request is sent to your ISP (Internet service provider) where it is dispersed to various routers.



3 The request is sent from Internet router to Internet router. Each router breaks down the address, sending the request along to the proper Web server.

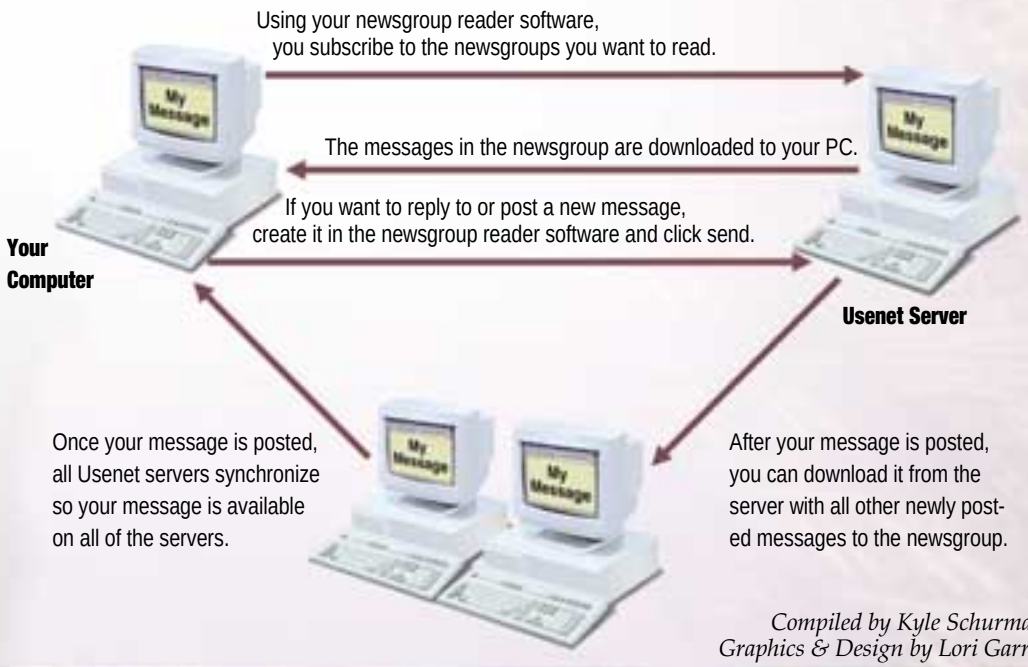
4 When the address request reaches the correct Web server, the server determines which Web page is being requested.

5 The Web page you've requested is sent through another series of routers on its way back to you.

6 The requested page and all of its elements are returned through the routers and your ISP to your computer, where your Web browser displays it.

Newsgroups

A newsgroup is a topic-specific discussion area where visitors can read and post messages. In moderated newsgroups, a moderator screens all messages, deciding which should be posted to the newsgroup. In unmoderated newsgroups, all messages are posted, regardless of content. To read messages in a newsgroup, you must subscribe using your newsgroup reader software.



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