Have you ever wondered how the internet worked? The infrastructure of the World Wide Web is an abstract idea based on what is simply a communications standard. In other words, the internet is really just one computer communicating with another, using a set of rules that have been officially standardized.

Pretend you're sending a package to a relative through the post office. First, it must be written down, sealed or packaged accordingly, put in a mailbox, and a postman receives the mail—the same way you type a URL address and hit Enter in an internet browser. Next, the postman gives it to the post office, who then sorts the mail based on the address on the package and transmits it to its destination. When it arrives at the post office near the destination, the mail goes through almost the same process as before, but in reverse. The destination is sorted, set with the mailperson, put in the recipient's mailbox, and the recipient opens the package and receives the information.

The way the internet works is very similar to this process. It makes sending information extremely easy using various different rules called protocols. For example, when you type a URL into a web browser, after you hit Enter, you start sending packets of data using something called the Hypertext Transfer Protocol, but you've probably heard of this as HTTP. When you send your friend an email, you're using the Simple Mail Transfer Protocol, also known as SMTP. Or maybe when you're just video chatting or calling a friend over your computer, you're using the Session Initiation Protocol, SIP.

All of these protocols lie within a protocol that is used for communications between machines themselves, commonly referred to as TCP/IP. For secure connections, TCP requires a three-way handshake between two computers that are talking to each other over the internet. To start, the first computer has to ask if the second one is there by sending a synchronized packet known as SYN. Then when the second computer replies saying that it was there, he sends back a synchronized acknowledgement packet, abbreviated as SYN-ACK. Lastly, the first computer sends back an acknowledgment, a short way of saying OK, and the friendship is now established.

This protocol, like many others, is one of the rules that computers follow to communicate over the internet. And although it seems complicated, this makes sure that your computer has a secure connection. This way, your computer controls who it's talking to and whether or not it's trustworthy. The person it's talking to might be a total stranger at first. But without some way of communication and letting people know who's who, you couldn't start a conversation. So long as your computer doesn't talk to strangers without these rules, you should be doing just fine.

[MUSIC PLAYING]