

How the Web Works

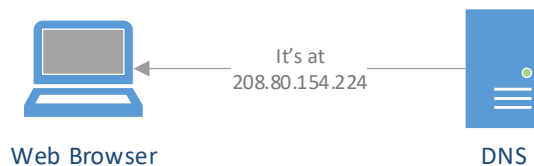
Web Browser

In order to access a web page, you need to use a web browser. Web browsers are responsible for taking your input and converting it into messages that can be sent across the internet to communicate with servers and retrieve web pages. When your web browser sends a request, like to access www.wikipedia.com, it's sent from your local machine to the server where Wikipedia lives. But before it can do that, it needs to contact the DNS.

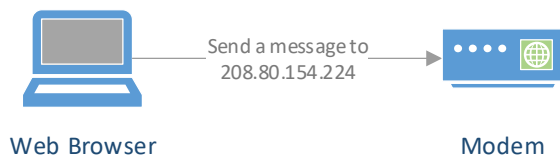


Domain Name Service (DNS)

The Domain Name Service (DNS) is a special type of server that translates a web page's friendly address (www.wikipedia.com) into its computer address (208.80.154.224). Computers don't understand human language, so we need to use the DNS in order to translate into something the computer can understand.

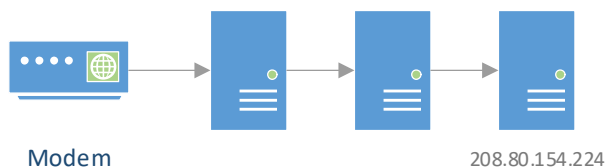


Now that your web browser has the computer address of the web page you want to visit, it can send a message to that address asking to view the page. Messages sent from your computer to the internet are handled by your modem.



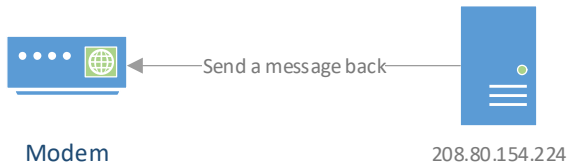
Modem

Your modem is the piece of hardware that connects your house to the internet. Its job is to take all of the messages from your computer and make sure they go to the right place, like the post office. Just like the mail, it is usually not a direct path between your house and where you sent your message.



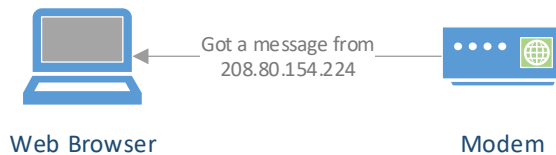
Server(s)

The server responsible for a web page has a lot of work to do once it gets your message. First it has to make sure you're allowed to access the web page you asked for, then it has to get the page ready for you based on your settings, and finally it has to send the page back to you once it's ready. The server sends the web page, or error message, back to you exactly the same way your web browser sent its message.



Modem

Just like the server, your modem has a computer address so it can receive messages from the internet. Once your modem receives a new message, it is responsible for unpacking it and sending it to the web browser it belongs to.



Web Browser

Now that your web browser has received a message back from the server, it is now time to make a web page out of it. Web pages are usually made up of HTML, a language that tells the computer how a page should look, so your web browser has to unpack all the HTML from the message it received and display it on screen. And all this usually happens in the blink of an eye.