IP

More generally, **IP** is **Internet Protocol**, which really just means that every computer (and phone and tablet) on the Internet follows a certain set of rules

IP Address

An **IP address** is a unique address that identifies these devices on the Internet (well, these days we’re actually running out of addresses, but more on that in a second).

AP

**AP**, **access point**, which typically comes with antennas. The access point allows devices to talk to the rest of the network wirelessly. At home, this might be called a home router, made by D-Link or Linksys or the like.

Router

**router**, and there is other equipment in between the router and the cloud on the right, representing the rest of the world.

DNS

**DNS** is a bit more interesting, standing for **Domain Name System**. These servers translate the URLs of websites to IP addresses, and vice versa.

TCP

**TCP**, **Transmission Control Protocol**, is another technology used on the Internet, often used together with IP (you may have seen TCP/IP).

Ports/Services

Some different ports, 21 FTP, 25 SMTP, 53 DNS, 80 HTTP, 443 HTTPS. A port number in TCP is a separate 16-bit integer value, so in theory can be really big, but in practice under a few thousand.

Traceroute

We can actually see the routers that our messages go through

HTTP

**HTTP** stands for **Hypertext Transfer Protocol**, or what web browsers use to speak to web servers.

SMTP

**SMTP**, for outbound email, is 25.

HTML

You’ll see lots of cryptic text, and the response is in the language called **HTML**, **Hypertext Markup Language**.