

What is the Internet?

Let's start with the big question.

WE'LL COVER THE FOLLOWING



- But First, What's a Network?
- The Internet: A Network of Networks

The Internet permeates our very existence. Most of us cannot imagine life without it. We often depend on it for livelihoods, for routine commutes, and for entertainment. It has become almost like a utility. You're accessing this course through the Internet.

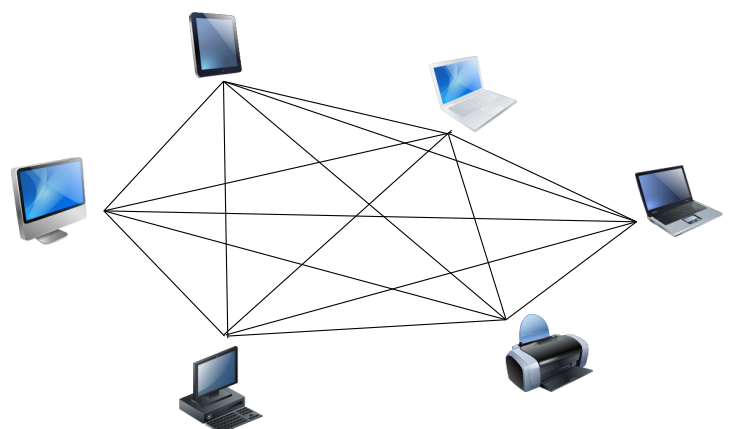
But how does it actually work? What goes on behind the scenes? Well, you've come to the right place to learn that! The Internet is a global network of computer networks.

But First, What's a Network?

A **network** is officially defined as a **group or system of interconnected people or items**.

So, by this definition, train stations connected to each other with rail tracks make up a *railway* network. People who follow each other on Twitter make up an online *social* network.

Similarly, computers connected to each other with cable or wireless



A basic computer network

radio make up a *computer network*.

Why Computer Networks?

There are **two main purposes** of computer networks:

Communication using computers and **sharing of resources**. An “internet” allows doing these two things across different computer networks.



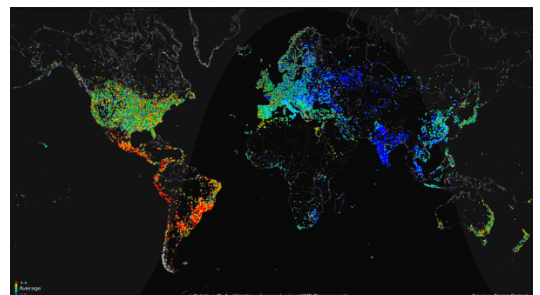
Note: internet vs. Internet An internet with a lowercase “i” is *any* interconnection of computer networks. Whereas the global Internet is always spelled with a capital I.

The Internet

The Internet is essentially a network of computer networks.

So your personal computer is connected to other computers at your house or workplace to create a small computer network, which is in turn connected to other computer networks. And so the global Internet encompasses a complex web of interconnected computer networks.

This concept can be better visualized in the illustration below:



A heat map of the usage of the internet over a 24-hour period

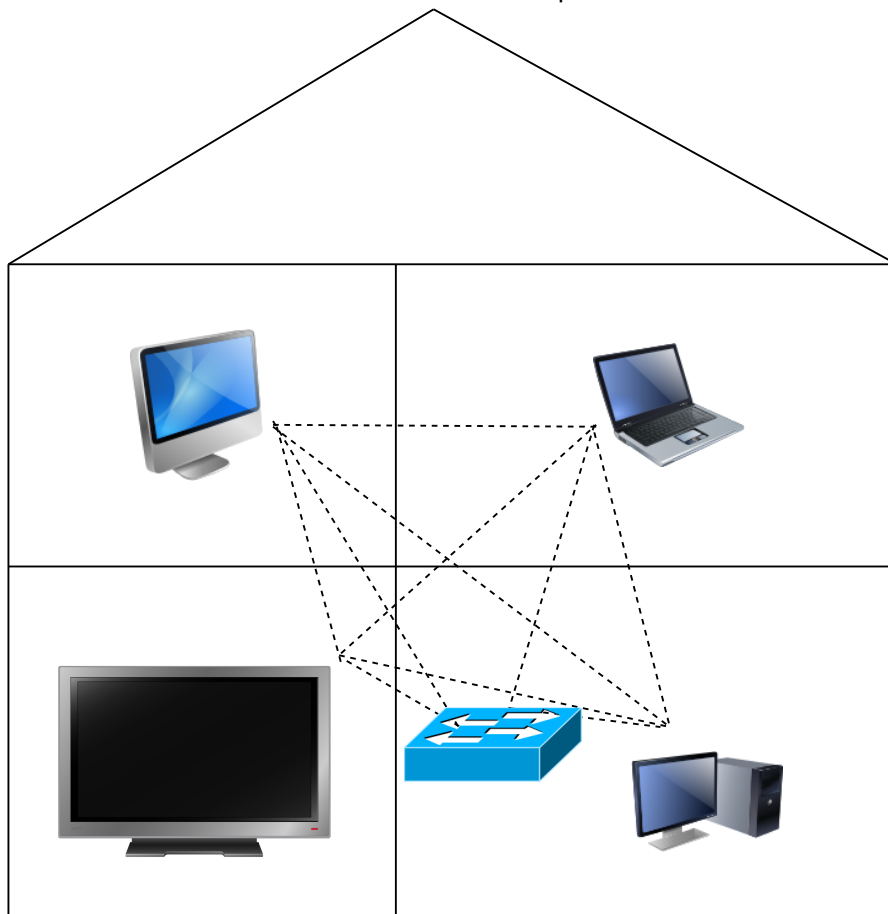
The Internet: A Network of Networks

Your Computer

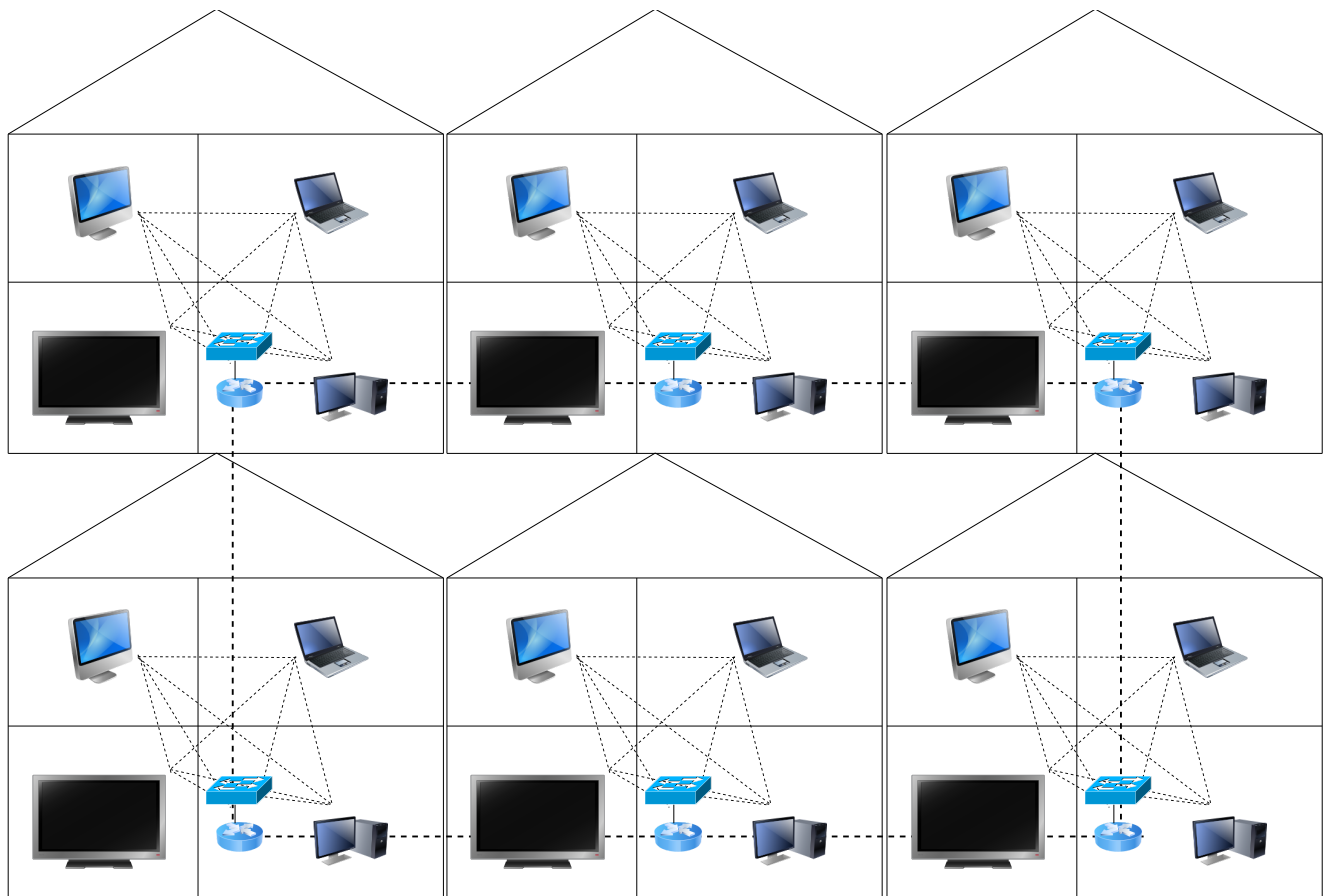


The Internet: A Network of Networks

Then the devices at your workplace or home are connected to each other to make up a network



The Internet: A Network of Networks



Then, all the houses in a neighborhood are connected usually via devices called 'routers'.
Routers forward messages from one end to another.

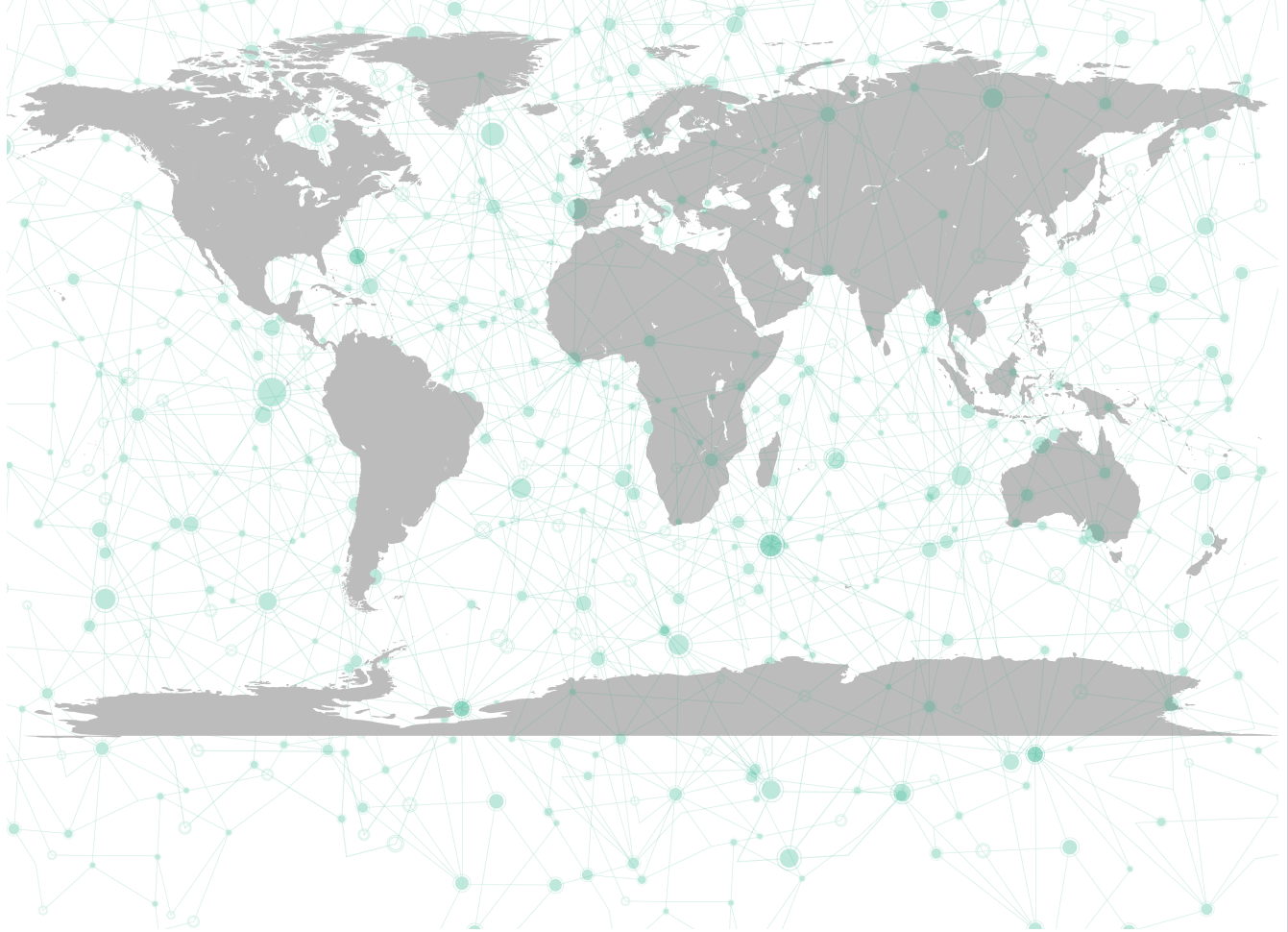
The Internet: A Network of Networks



Then, all of the neighborhoods and cities in your country are interconnected to make up a network of networks..

The Internet: A Network of Networks

Finally, every country is connected. The Internet is simply a network of networks of ... networks.
Networkception if you may!



The Internet: A Network of Networks

5 of 5

—

⌂

In the next lesson, we'll take a look at a short history of the Internet and how it all began.