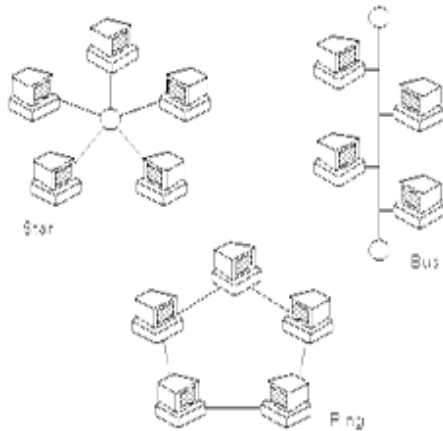


# How does the internet work?

First, we need to know what a network is, this is a series of computers connected together by a computer called a server.

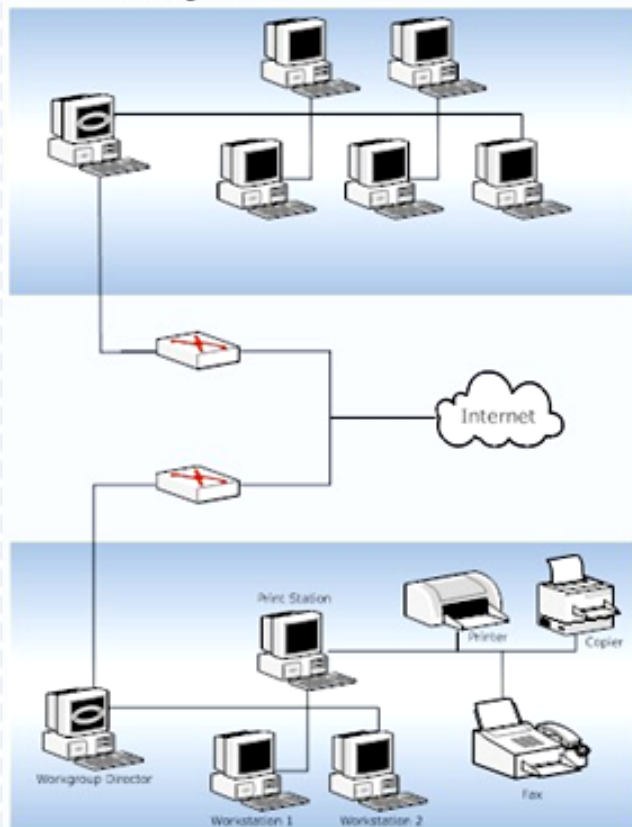


Local Area Network (LAN) - this is a group of computers connected over a small area.

There are 3 types of LAN. The most often used is the star even though it is the most expensive. Why do you think that is?

Wide Area Network (WAN) - This is groups of computers connected over a large area. They often do it by connecting LANS together, like on the left picture below.

General WAN Diagram



The Internet is a WAN.

A network of bank cash dispensers is a WAN.

A school network is usually a LAN.

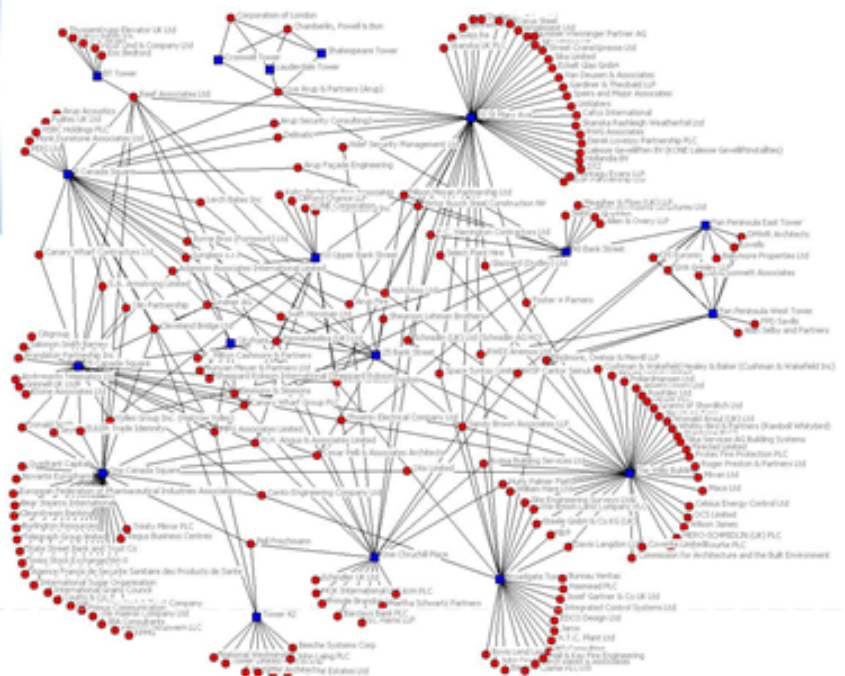
LANs are often connected to WANs, for example a school network could be connected to the Internet.

WANs can be connected together using the Internet, leased lines or satellite links.

What are the blue squares?

And the red circles?

What a WAN actually looks like is a bit like this!



# How does the internet work?

Now you know what LAN and WAN are, you need to know how the internet works. Watch this video as a class. Can you answer the questions below?

[http://www.youtube.com/watch?v=7\\_LPdtKXPc&feature=related](http://www.youtube.com/watch?v=7_LPdtKXPc&feature=related)

How could you describe the internet?

Fibre optics are one way the internet information travels, give 2 more examples.

What is an IP address?

A server is?

Why is your PC not a server?

What does ISP stand for?

Can you find out what DSL stands for??

What is a packet?

The video isn't totally accurate; It doesn't really explain what DNS and TCP are.

**DNS**—You are not going to remember an IP address when you search are you?

Nope. That's why we use DNS, AKA; **Domain Name Servers**

<http://www.youtube.com/watch?v=wFYCFmGZ4iU>

<http://www.youtube.com/watch?v=2ZUxoi7YNgs&feature=related>

**TCP or Transmission Control Protocol** is? Use the internet to find out