If you’ve ever heard of a data centre, you might be thinking of a hugely techie building full of作出填写的 barrel. You probably think they are really expensive and use a huge amount of electricity.

**What is a data centre?**

But more importantly, why does it matter to you?

Put simply, a data centre is a large warehouse full of computers.

**Do I use a data centre?**

The answer is yes and not only that, but you probably use one every day.

**Streaming a movie**

**Searching for something online**

**Checking your online banking**

**Replying to an email**

**Editing a document online**

**Even the storage of your medical records**

**Connectivity**

It’s vital to be able to rapidly access the information you need from a data centre.

This is where connectivity comes in.

Data centres are connected to the world through thousands of miles of fibre optic cables. These span the globe, traveling under the seas to link up the world.

This can be done through the internet or through private networks.

**Security**

Lots of the information is very precious.

Data centres hold a huge amount of information. For example, all high street banks use data centres.

Therefore, your bank details live in a data centre.

So to stop anything being stolen, data centres have military-style security: security fencing, Trembler wire, biometric access (fingerprint or iris scanning), specially trained guards, man traps, and CCTV.

As well as this, there are different layers of digital security, such as DDoS mitigation.

**Cooling**

The computers make lots of heat.

Like the computer on your desk, the servers in data centres get hot.

So due to the huge amount of computers, there is a massive amount of heat generated.

Therefore, data centres need to have equally powerful cooling (just like air conditioning).

**Space**

Inside the data centre is hundreds of racks, each rack is full of computers, often called servers.

These racks are huge. Different kinds of servers have different needs.

So aren’t we better off using a few servers?