

Network Security

Four methods of dealing with security:

1. Authentication
2. Encryption
3. Firewall
4. MAC address filtering

[This links to Unit 6 - cyber security](#)

Network Security

1. Authentication

Making sure only the people you want to have access can access the network or data

- usernames and passwords
- different levels of access permissions
- read/write permissions
- biometric access restrictions
- password complexity and security

Network Security

2. Encryption

Making sure data that is encrypted so that only people with the key can understand it

- so if someone does get access to the network they can't read data

Network Security

3. Firewall

Firewalls sit between the network and the outside world

They restrict access to the network and monitor incoming and outgoing network traffic

- requires up to date software
- help protect against malware
- can help stop DoS attacks

Network Security

4. MAC address filtering

Each device has a unique MAC address that never changes. MAC address filtering allows only certain machines to access the network

- means only known machines have access
- can be awkward when new machines are added
- lacks flexibility
- anyone with access to a device can access