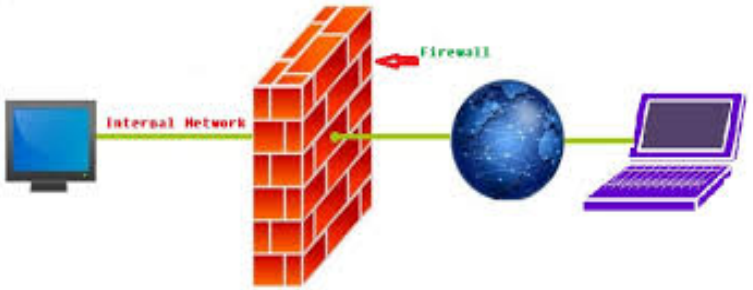
Firewalls

Firewall

- A firewall is a security device that monitors incoming and outgoing network traffic and decides whether to allow or block specific traffic based on a defined set of security rules
- A firewall can be hardware, software, or both
- It can prevent unauthorized access to your d or computing devices

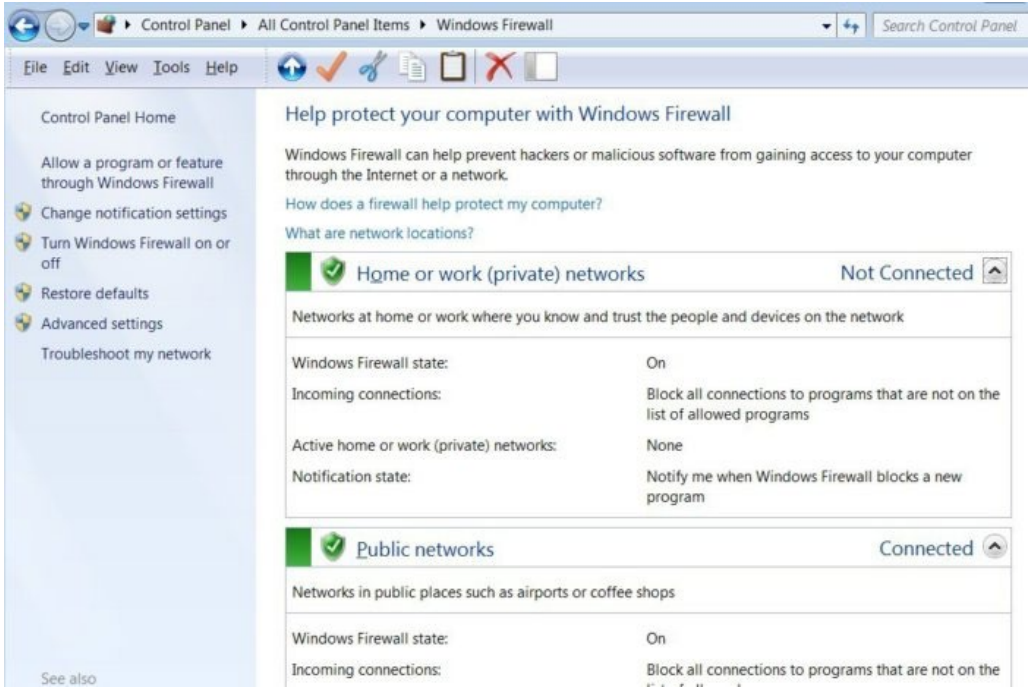


Protecting Your Data & Devices

The default rules for a firewall is that all traffic is allowed out from the network \ host and no traffic in unless configured otherwise

Basic Windows Firewall

- Incorporated into Windows
- Stateful
- Fundamental rules:
  - Firewall on/off
  - Allow apps through
  - No scope

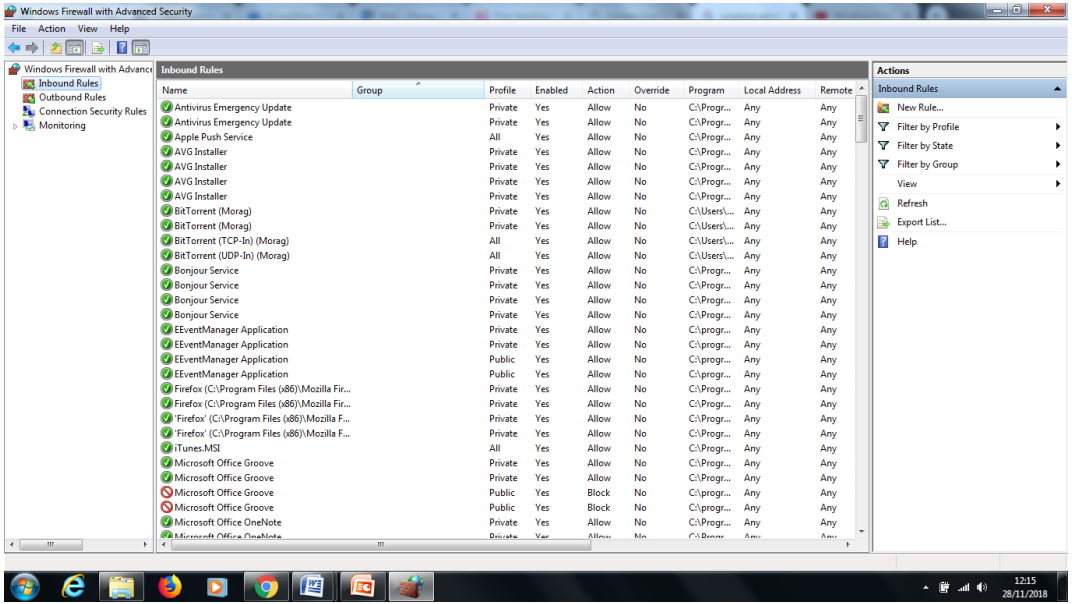


Advanced Windows Firewall

Control traffic by:

- Application
- Protocol Type (UDP, TCP)
- Port Number
- IP address

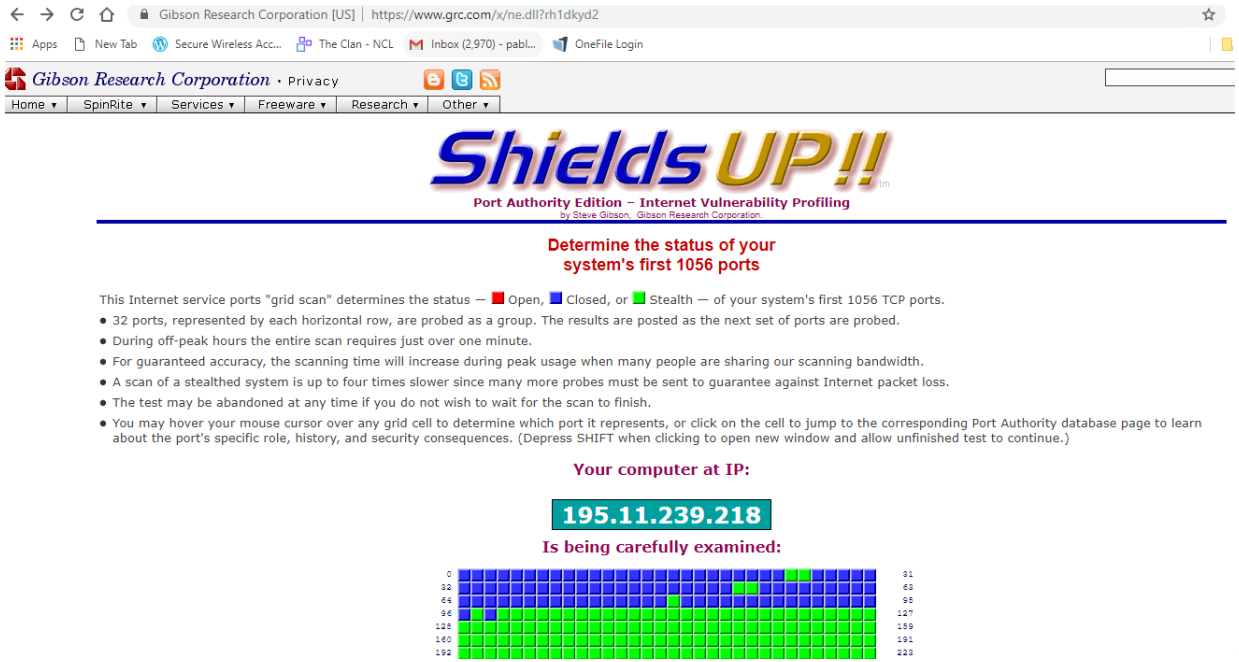
Or a mix of them!



Practical exercise on Moodle!!

ShieldsUP Security

The Shields up website (https://www.grc.com/x/ne.dll?rh1dkyd2) All Service Ports function will test which ports are open on your computer firewall!! (as shown below).



Alternative personal firewalls

- Research three free personal firewalls.
- Why use them instead of Windows Firewall?