WINDOWS FIREWALL LAB

Windows Defender Firewall (Windows 10)

Firewall and Network Protection Settings

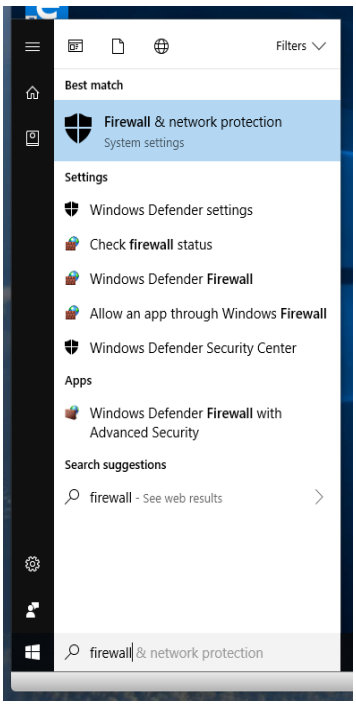
Microsoft Windows Firewall formerly known as Internet Connection Firewall

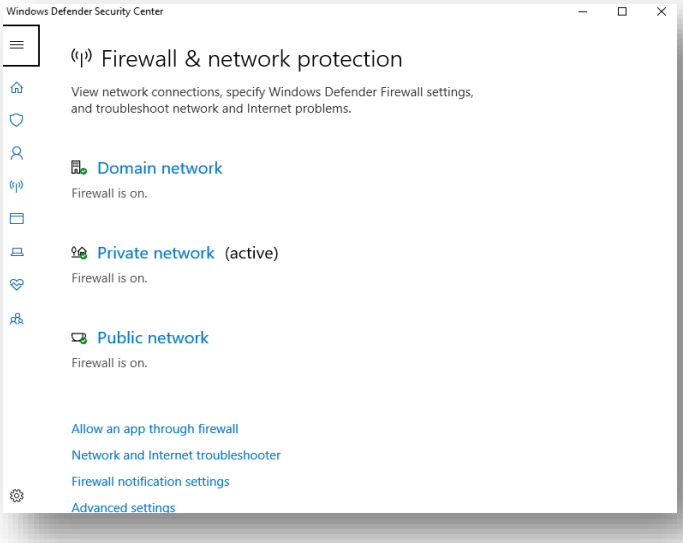
Windows Firewall Lab.

Lab information:
Windows Firewall (officially called Windows Defender Firewall in Windows 10), is a firewall component of Microsoft Windows. It was first included in Windows XP and Windows Server 2003. Prior to the release of Windows XP Service Pack 2 in 2004, it was known as Internet Connection Firewall. With the release of Windows 10 version 1709, in September 2017, it was renamed Windows Defender Firewall as part of the "Windows Defender" branding campaign.

In this lab, you will change a number of firewall settings to stop certain traffic from being used on a Windows 10 machine.

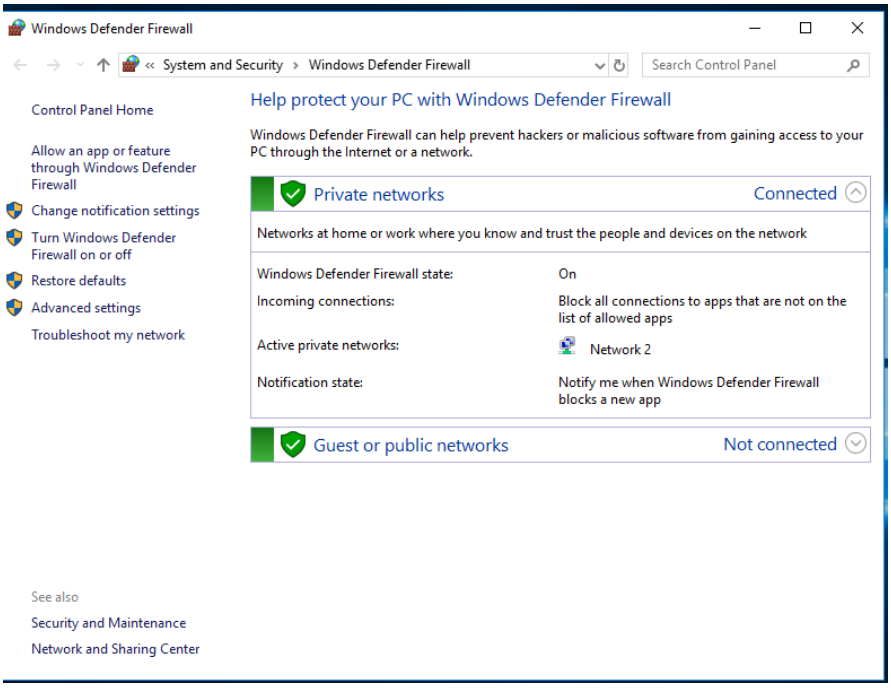
Step 1:
Search for firewall within the Windows search bar.



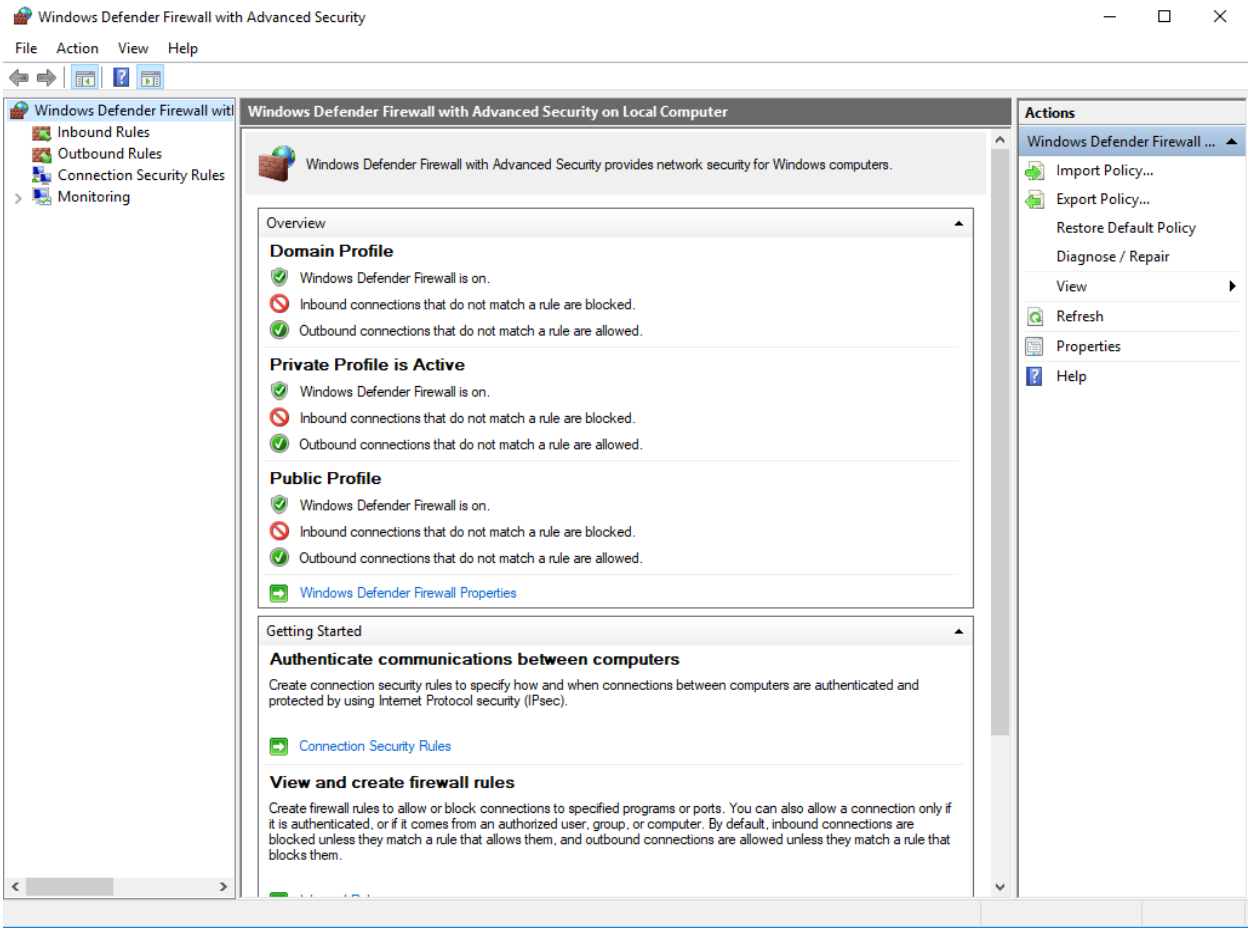


The firewall and network protection area shows us the firewall status with a basic view.

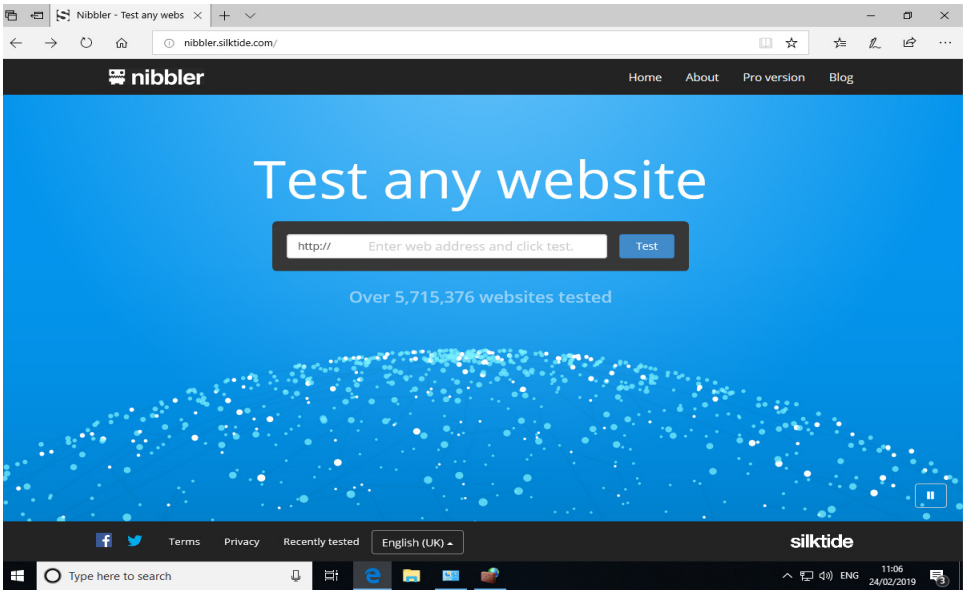
We are required to open the Windows Defender Firewall. This is a more advanced version of the above option.

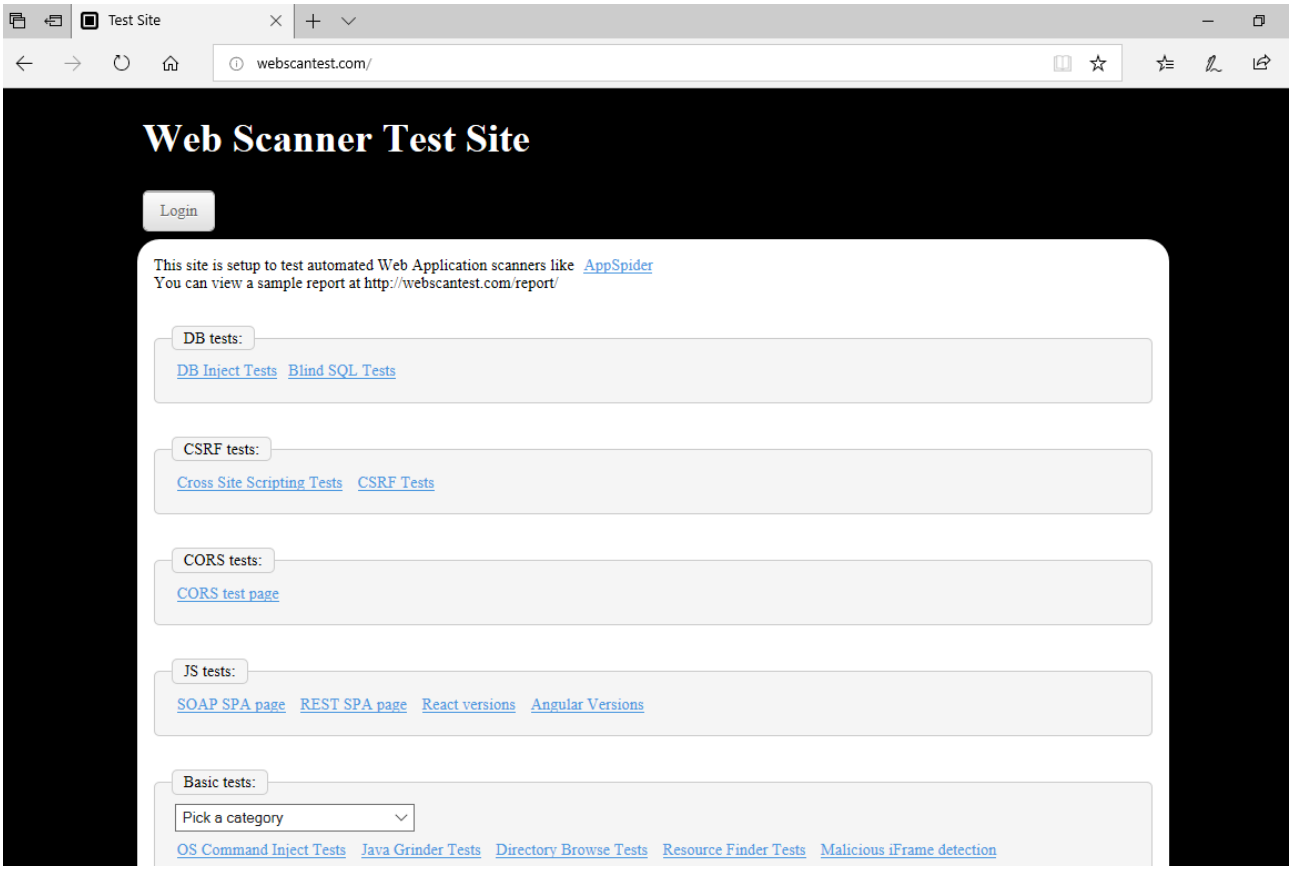


Let’s open the advanced settings from the left-hand sidebar.



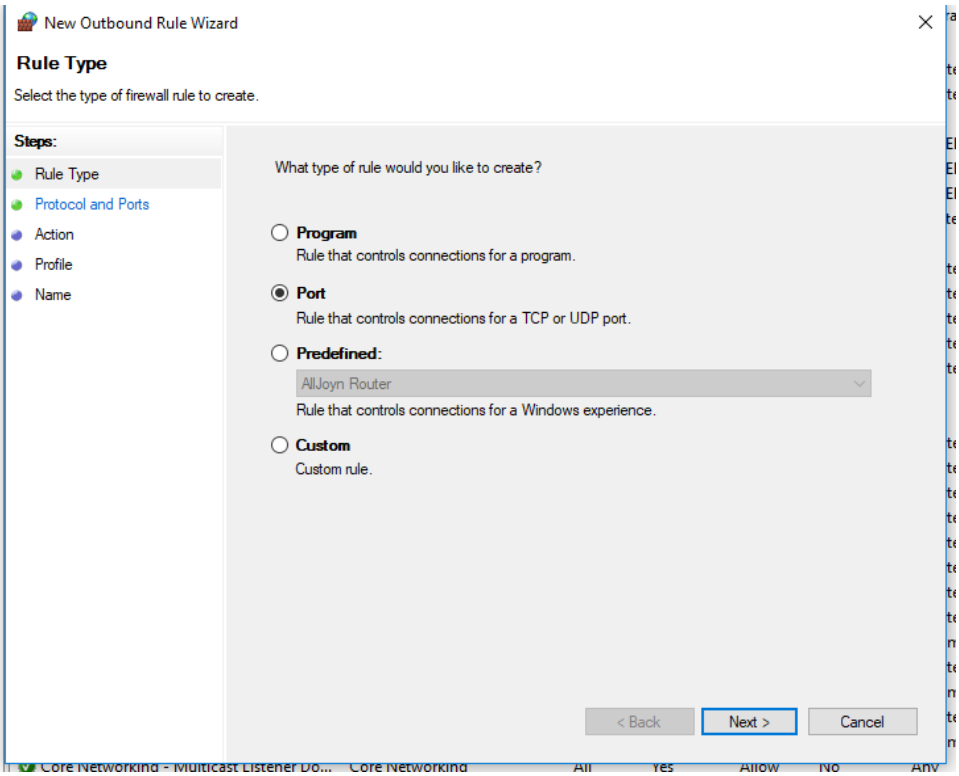
Step 2:
Now, we will create an outbound FW rule that blocks HTTP traffic on the PC. Firstly, let's browse to a few HTTP websites to prove that HTTP is currently working.



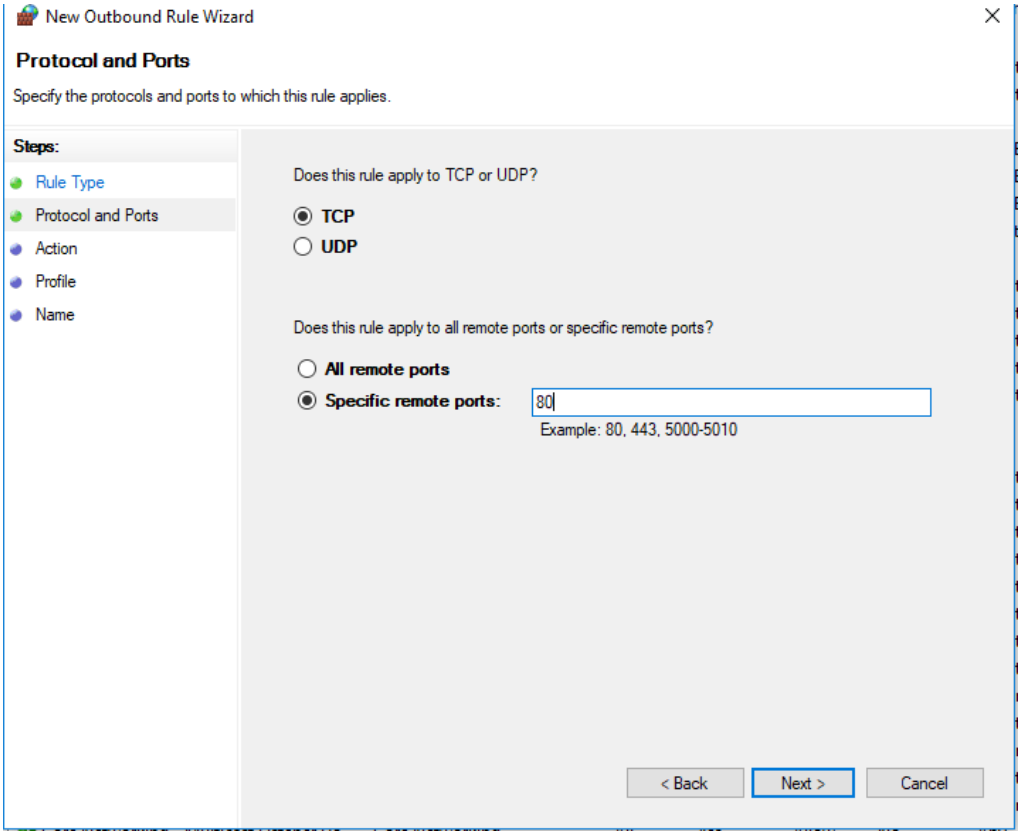


Now, let's open the Windows FW and create a new outbound rule…

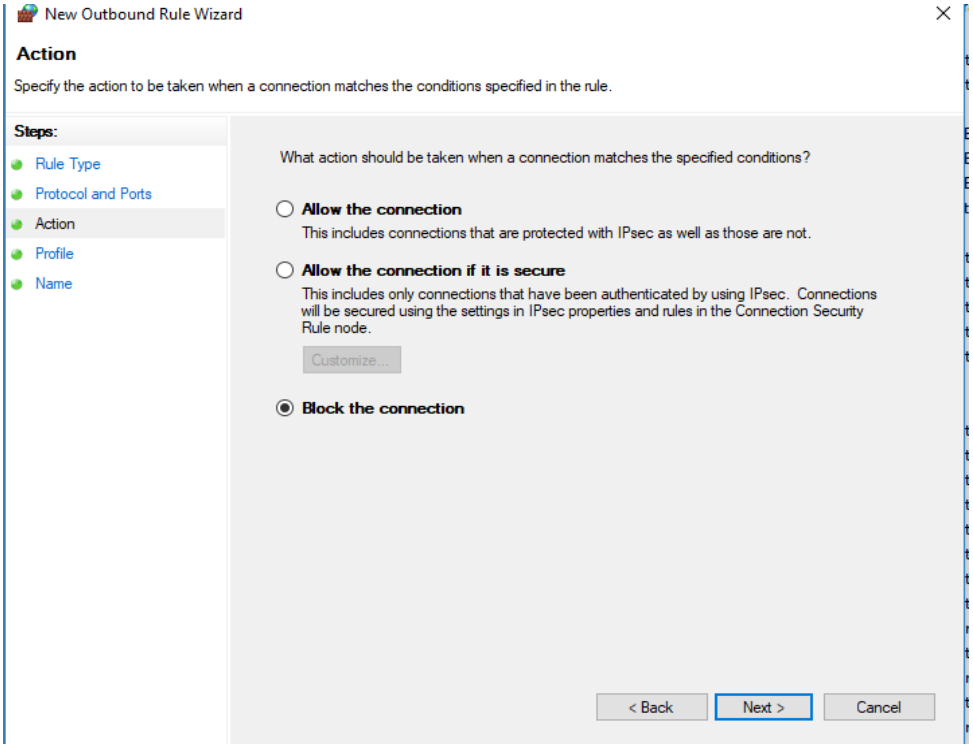
We will choose the port option.



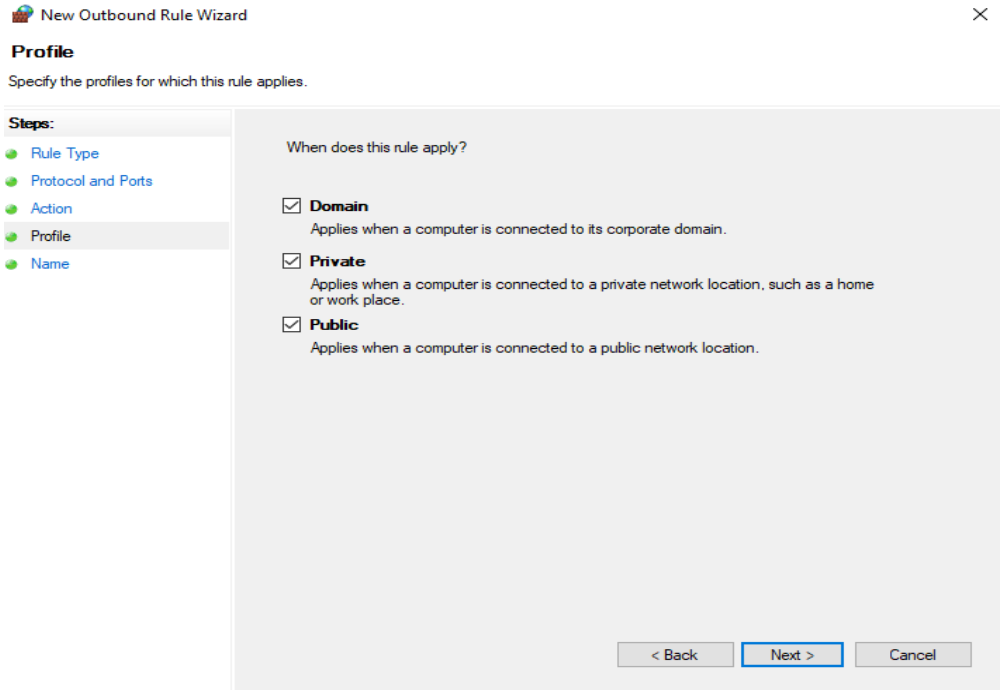
When asked at the next stage, we will type port 80.



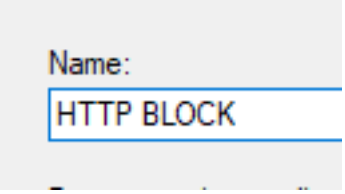
We will block the connection.



Leave all three applied as per the default option.



Give it a name.

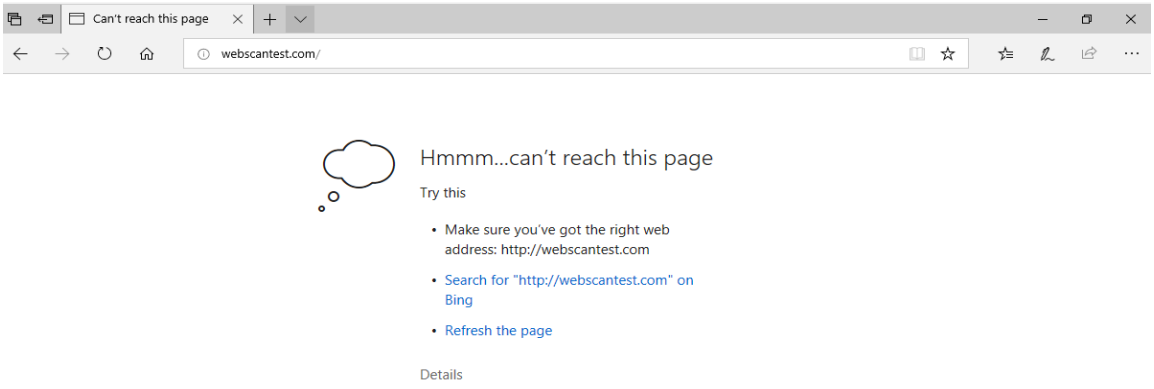


The FW rule will now be applied.

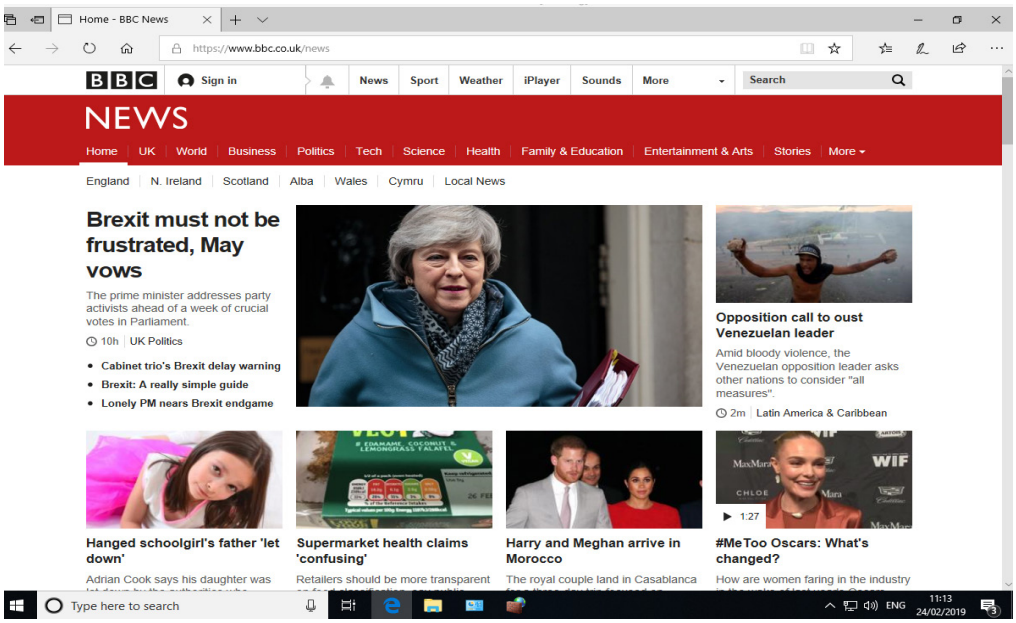
Next, browse to the same websites as before and you will see that our rule actually blocks this from happening as they are using port 80 which is for HTTP traffic.

Please browse to HTTPs websites. These will still work as they aren't using port 80, they are using port 443.

The below screenshot shows that the same website as before does not work.



However, the below HTTPS website test does work, as expected.



Much more can be done with the Windows FW. The rule that we have applied here is applied only to this PC. Companies will most likely use a Windows Server and issue group policies, whereby the administrator can set company-wide firewall settings from one panel, rather than having to go to every PC and change the FW manually.