Connecting home devices to the internet in halls

1 What’s a “home device”?

We are talking about consumer-grade technology; things like Apple TVs, Smart TVs, games consoles, streaming TV devices, but don’t bother with the Wi-Fi toaster or internet-connected fridge; just use the ones we provide in the kitchens.

Why can’t I just use them like I do at home?

You will find that very few home devices will connect to eduroam, this is because they don’t often provide support for “WPA2-Enterprise” mode because it is not something you will find in the average home setup.

In case you missed it, eduroam is a global (yes, really: Worldwide) standard way for academic institutions to allow their staff and students to connect to the wireless networks in each other’s buildings and campuses. If you have your laptop or phone set up to use eduroam here and go on holiday to Ecuador, you will find you can rock up to any of the 64 eduroam-enabled campuses and you probably won’t even need to log in; your device will just connect.

Eduroam uses the WPA2-Enterprise protocol to keep the network secure.

But I can just set up my own network

The University network connection policy does not allow anyone (staff or students) to connect their own network equipment to ours. There are really good reasons for this, but in short the University network is really quite big and very complex. To keep this working for everyone we can’t have people connecting uncontrolled devices to it. It is also very likely that if you did this you would break the security policy which keeps you and everyone else safe. For the same reasons:

You must not connect a wireless router, 4G hotspot, broadband router, wireless extender or anything like that, to our network.

We aren’t kidding about these rules. If you connect things up using these banned devices, or not following the instructions below, you could allow other people to use your username to access the internet and then you’ll have to explain why it wasn’t really you who downloaded all that illegal material, or visited those websites… So be warned!

The rest of this document contains instructions for connecting home devices to the university’s network.

Please note that we are unable to test all types of devices ourselves and new versions of software and devices are released regularly. We therefore cannot guarantee that you will be able to connect your device using these instructions.
Two methods are described. For both methods your device must have an Ethernet port, or you must have an Ethernet adaptor, e.g. an Ethernet to USB adaptor.

- For the first method you use the built in web browser on your device.
- The second method uses a Windows computer as a gateway for your device.

## 2 Connecting devices with a built-in web browser

For example: normally works with PS4, Xbox (one and 360), most Smart TVs

1. Connect Ethernet cable from the network point in your room to the device

![Ethernet connection](image)

2. Bring up the web browser on the console, or TV and navigate to any http:// website (e.g. [http://neverssl.com](http://neverssl.com)).

3. Log in via the captive portal which looks something like this:

   ![Captive portal](image)

   *University of Brighton*

   Enter your university username and password to access the Internet

   [contact us if you experience connection problems](http://neverssl.com)

4. Enter your university username and password – the same ones you use to login into studentcentral

5. You will need to login every 24 hours, as with any other device such as a laptop or desktop PC

That’s it. That’s all you need to do and this should work for most modern devices, just so long as they have a web browser installed.
3 Using a Windows computer as a gateway – for devices with no web browser

For example: Now TV box, some older smart TVs, older Playstations and XBoxes

This one gets a bit more involved, so if you aren’t technically confident, then it may be best to find someone who is and ply them with coffee/cakes. Don’t try this unless you really need to, as it is very fiddly.

In this method you connect your Windows computer to eduroam and then share your eduroam connection on your Windows computer to your Playstation (or other device), using an Ethernet cable.

If you don’t have an Ethernet port on your computer, you can get a USB to Ethernet adapter quite cheaply.

Your Playstation will use your computer’s eduroam connection to get to the internet

If you do this you MUST disable the Wi-Fi on your playstation/device, or turn sharing off, before you do. If you don’t do this, other people could use your internet connection for unlawful purposes (e.g. downloading pirated software or pornography) and you will be held responsible for this.

Instructions

1. Connect your Windows computer to eduroam

2. Use an Ethernet cable to connect your Playstation to the Ethernet port on your computer, but leave your Playstation turned off for now.

3. Go to “Network and Sharing Center” via the Control Panel, Network and Internet

OR

Click Network and Sharing Center
4 Click Change adapter Settings

5 Right-click Wi-Fi and choose Properties… Only do this for the Wi-Fi adapter DO NOT do it for any other type of connection.

6 On the Sharing tab, tick “Allow other network users to connect through this computer’s Internet connection” and UN-tick “Allow other network users to control or disable the shared internet connection”
7 Now click **OK** and close the Control Panel.

8 Turn the Playstation on and it should now be able to access the internet as long as you have a working eduroam connection on your PC.

Please note that it is very important you only share the eduroam connection. Do not share a wired (cable) connection. If you don’t have eduroam in your room, contact the IT Service Desk for help.

DO NOT connect the Ethernet on the computer and share it as a personal hotspot – this is against the rules and could get you into big trouble.

### 4 Using a Mac computer as a gateway

Apple do not allow this on secure wireless networks.

### 5 Other devices

For devices with no Ethernet port which are also unable to connect to a secure wireless (WPA2-Ent) service, there is no easy way to connect to the university network. For example:

- Amazon Echo (Alexa)
- Amazon FireStick
- Google Chromecast