**ResNet help**

**ResNet** (Residences Network) is the cable network in student rooms providing access to the internet and campus network.

All University student rooms have computer network points, which allow you to connect your own device to ResNet.

ResNet uses **PASS (Permissive Access Security System)** which enables devices such as laptops, games consoles, or tablet computers, to connect to the University network. All devices on campus, must register though PASS to be able to connect to the University network.

Information and instructions for connecting to ResNet

1. Plug the network cable into the network socket on your computer.
2. Plug the other end into the network point on the wall near your desk.
3. Switch on your computer.
4. Start your web browser.
5. Follow the instructions on the homepage to continue the ResNet (PASS) validation process.

If these instructions do not work, try one of these further checks, then retry:

- Check your network cable is plugged in securely — unplug it from the network point on the wall and from the network socket on your computer, then carefully plug it back in again.
- Check your network cable works — to check, borrow a working cable from a friend, your Porter’s Lodge or the ISS Service Desk.
- Try using a different internet browser — and if you’re on Windows 10, don’t use Edge!
- Check the time and date (including time zone) on your device are set correctly — if you make a change to it, restart your computer before trying to access ResNet again.
- If you reach the login page, log in with your University account username and password — that is, using the username based on your name (e.g. bloggsj), not based on your personal email address.

You could also try one of the solutions below:

**Configure ResNet using Windows**

1. Click on the **Windows** logo in the bottom left of the screen, to open the Start menu.
2. Click the **Settings icon** (cog) in the bottom-left of the Start menu.
3. Click on **Network and Internet**, then **Network and Sharing Center**.
4. From the options on the left hand side, click on **Change Adapter settings**.
5. From the list of devices, right click (or press and hold on a touch screen) on the Ethernet Adapter, and click **Properties**.
6. Double click on **Internet Protocol Version 4 (TCP/IPv4)**.

7. Ensure that both the **Obtain an IP address automatically** and **Obtain DNS server address automatically** are selected.
8. Select OK and then OK again. Close any remaining windows.

9. Open your web browser (e.g. Edge, Firefox or Google Chrome).

10. The ResNet (PASS) page should automatically load. If not, browse to https://pass.lancs.ac.uk.

11. Follow the instructions on the website to continue the ResNet (PASS) validation process.

If you continue to have problems, please visit the ISS Service Desk in the Learning Zone with your device. Contact details can be found at http://www.lancaster.ac.uk/iss/help-and-support.

Configure ResNet using a Mac

1. Click on the Apple menu.

2. Select the System Preferences option.

3. From Internet and Wireless, click the Network icon.

4. Ensure that the Location list is set to Automatic.

5. Ensure that Ethernet is highlighted on the sidebar.

6. Ensure that Configure is set to Using DHCP.

7. Click Apply.

8. Start your web browser — e.g. Safari — the ResNet (PASS) page displays.

9. Follow the instructions on the page to continue the ResNet (PASS) validation process.
If you continue to have problems, report a problem.

**Configure ResNet on another device**

1. Connect the device to ResNet (PASS) via the wired cable and use the inbuilt browser to load any internet site.

2. The ResNet (PASS) page should automatically load. If not, browse to https://pass.lancs.ac.uk/ and follow the instructions on the ResNet (PASS) website to complete the validation process.

   If it doesn’t, or on the device you use this isn’t possible, you can also try to validate the device from another machine.

**To validate from another machine:**

1. Go to the PASS Portal.

2. Click Continue to validate by MAC address or Validate an additional device (e.g. games console).

3. You can then follow through the process to validate another device on ResNet (PASS). Once complete you simply need to plug the device and use it on ResNet (PASS).

If this doesn’t work, bring the device along to the ISS Service Desk in the Learning Zone, ideally with any respective cable or screens it needs to connect to, and we’ll take a further look at with you. Porters can provide trolleys to wheel heavy devices if need be.

**Frequently asked questions**

**Can I register multiple devices to ResNet?**

You can register unlimited devices to ResNet (PASS), but can only connect one device at a time via the network point in your room.

The connection of wireless access points, hubs, switches and routers is not permitted.

**Where can I get a replacement ResNet network cable?**

You can get a replacement network cable by visiting the Learning Zone Support Desk.

**How can I change the NAT type of my Xbox from Strict when connected to ResNet?**
Unfortunately, **NAT Type Strict** isn't a setting on our end, rather a limitation of the hardware running ResNet (PASS).

Home routers often use a service called uPnP to allow your console/game to forward ports from the router's external address to your internal address. This service doesn't scale to a network the size of ResNet (PASS), and whilst it may allow a few consoles to see **NAT Type Open** everyone else would still see **NAT Type Strict**. (You'll find this is the case if you're using more than one console on a home connection at the same time).

On commercial grade equipment such as ours, a network administrator would have to change settings every time a console is turned on which is not workable. Even if they did, only a handful of people would see 'NAT Type Open' in a housing block.

**Can I connect my games console to ResNet?**

Yes you can — but note that you can only connect one device at a time via ResNet.

To connect your console you will need to know the MAC address of your console, and then validate it with PASS from another machine.

1. From your other device, browse to pass.lancs.ac.uk
2. Click **Continue to validate by MAC address** or **Validate an additional device (e.g. games console)**.
3. You can then follow through the process to validate your console. You will need to know the MAC address of your console. For help on this, see **Find the MAC address for a device**.
4. Once complete you simply need to plug in your console using the wired ethernet cable.

**Can you assign a static public IP address on ResNet?**

Unfortunately, we're not able to assign a static public IP address on the Residences Network (ResNet) as this isn't a service that we provide.

If what you're attempting to do is directly related to your studies, you may be able to ask your department to provide a virtual server for you to host these projects on, which can be set up to have a public address.

It's worth noting that the use of ResNet is limited by the JANET Acceptable Use Policy (AUP) which prohibits commercial use of the network, except for the day to day operations of the University. This includes work that is not-for-profit.