

## Troubleshooting wireless on eduroam

- **802.11b Disabled:** On the 17th December 2012 legacy DSSS data rates were disabled to improve performance of the service. As a result 802.11b Wi-Fi clients will not be able to connect to eduroam or city-guest. This only affects clients with old hardware and can easily be rectified with an external Wi-Fi adapter.

### General Troubleshooting

- **I Cannot Connect to eduroam**

The following check-list resolves a majority of issues:

1. Authenticating to the **eduroam** SSID (Wireless Broadcast) requires a valid City University userid and password. Your City University userid must be appended with **@city.ac.uk** (e.g. abc1234@city.ac.uk). It is NOT your email address.
2. Ensure DHCP (Obtain IP address automatically) on your wireless card is enabled.
3. Ensure Proxy redirect within your web browser (e.g. Microsoft Internet Explorer, Firefox, Apple Safari) is disabled. Proxy URL must also be disabled!
4. Your Operating System may require additional configuration to connect. Please refer to the Guides at the following page for further information: <http://www.city.ac.uk/wifi>

- **My Connection is very slow!**

Wi-Fi (Wireless) is shared. Therefore, if there are 20 devices connected to 1 Access Point, each device will get roughly an equal share of the total bandwidth. This is known as the contention ratio. We have a program to upgrade our Access Points to increase the available bandwidth. In the meantime, you can either (a) move to a quieter location, or (b) stop Network intensive applications (e.g. P2P, BBC iPlayer, Video Streaming) whilst using the wireless service.

**Areas upgraded:** Cass Business School at Bunhill Row, University Building at Northampton Square (main Library).

Also, unlike the Wireless Site Survey which uses accurate measuring tools, wireless adapters may report inaccurate signal strength (i.e reporting excellent signal strength when it is in fact poor).

### Apple Mac OS X Known Issues

- **Apple Mac OS X 10.x Keychain:** There is a known issue with invalid items in the Keychain preventing successful authentication. To resolve; Open Finder and select Applications > Utilities (folder) > Keychain Access. This will display a list of items stored in the Keychain. Ensure the login keychain from the left-hand pane is highlighted and delete any reference to eduroam.
- **Apple Mac OS 10.7+:** Issue where user cannot authenticate to eduroam, but is able to connect to city-guest, go to Network Preferences, click on Wi-Fi, then Advanced..., remove the eduroam SSID, then select the 802.1X tab and remove the eduroam profile, exit and reconnect to eduroam, if still not working check the next step.
- **Apple Mac OS 10.7 (Lion and above) 802.1x:** As of Mac OS X Lion (and above) you can no longer modify the 802.1x profile. If coming from another institution or you have an old 802.1x profile this can cause connection problems. The following workaround is not supported by City University and is provided for help only. It is strongly recommended you backup your data prior to proceeding! These instructions will wipe any existing Wi-Fi networks! In Finder, navigate to /Library/Preferences/SystemConfiguration and manually rename the following files (e.g. filename.bak):

```
com.apple.airport.preferences.plist
com.apple.network.eapolclient.configuration.plist
com.apple.network.identification.plist
networkInterfaces.plist
```

## Apple IOS (iPhone, iPad, iPod touch) Known Issues

- If you change your City University password you must forget the eduroam Network and repeat the instructions.
- On initial connection your device may prompt: Unable to join the network "eduroam". Dismiss this and try again. If the problem persists, ensure you are not connected to city-guest and forget the network if you are.

## Google Android Known Issues

- **Google Android and Kaspersky Mobile Security:** Kaspersky Mobile Security configures a manual proxy which is known to cause eduroam configuration issues. This issue is discussed in the following Kaspersky user forum: <http://forum.kaspersky.com/index.php?s=90bd1b902ba9213299258230c6a9f4d2&showtopic=260035>
- **Google Android Gingerbread 2.3.6:** We are aware of an issue with Gingerbread 2.3.6 and Phase 2 Authentication. This will prevent successful authentication on the eduroam service. This appears to be a known issue as a patch is available for Samsung devices via Kies [»](#). This is reported to fix the issue on the Samsung Galaxy Y. For users of none-Samsung devices, please refer to the manufacturer for an update.
- **Google Android Wireless Roaming Issue:** There is a known issue with Google Android devices roaming on an Enterprise WPA2 infrastructure, which is what eduroam is based on. i.e. when moving from one location to another you will be disconnected from eduroam. The only known solution is to turn off/ on Wi-Fi and if this fails *Forget* the eduroam Wi-Fi and re-configure.
- **Google Android 2.2:** There is a known bug with 2.2.x Android phones that may prevent automatic connection to eduroam [»](#) It is expected that 2.3.3 (Gingerbread) will fix this issue. A temporary workaround to this bug is to toggle wireless off and on again. It has also been reported that Juice Defender will do this automatically (this is useful if your manufacturer will not issue an OS update).
- Occasionally Android users have problems with the connection dropping. We have had reports that [WiFi Fixer](#) can solve these issues.

## Microsoft Windows 7

- **Microsoft Windows Security Alert:** On first connecting to eduroam you may get a prompt saying the *connection attempt could not be complete*. Click the **Connect** button to connect to eduroam. Don't press **Terminate** - this will cancel the entire connection process and you will have to start again from the beginning.
- **Microsoft Windows 7 Cached User Credentials:** An automatic update to Windows 7 introduced an advanced setting. As a result of the update you may be constantly prompted for your credentials when attempting to join eduroam. To fix:
  1. Open the Network and Sharing Center.
  2. Click on Manage Wireless Networks from the left-hand pane.
  3. A list of configured wireless Networks will be displayed. Highlight eduroam and right-click. Select Properties from the context menu.
  4. Select the Security tab. A window similar to the illustrated is displayed.
  5. Select the Advanced settings button.
  6. Ensure the Specify authentication mode option is ticked.
  7. From the drop-down select User authentication. Next select the Save credentials button.
  8. Set User name to your City University userid and password. Your City University userid must be appended with @city.ac.uk (e.g. abc1234@city.ac.uk). Set Password to your City University password.
  9. Click OK to all windows to save the settings.

## Microsoft Windows Vista

- **Microsoft Windows Security Alert:** On first connecting to eduroam you may get a prompt saying the *connection attempt could not be complete*. Click the **Connect** button to connect to eduroam. Don't press **Terminate** - this will cancel the entire connection process and you will have to start again from the beginning.
- **Microsoft Windows Vista Corrupt TCP/IP Stack:** There are known issues with TCP/IP stack and corrupt routing tables in Windows Vista. Either of these issues will prevent successful connection to the Internet. Both issues are rectified via the Command Prompt (Start > All Programs > Accessories > Command Prompt - right-click and "Run as administrator").
  1. To reset the routing table type **route /f**. You will need to reboot your PC for the changes to take effect.
  2. To reset the TCP/IP stack type **netsh int ip reset**. You will need to reboot your PC for the changes to take effect. More information about this issue is discussed in Microsoft KB article 299357 <http://support.microsoft.com/kb/299357>

## Linux

- **Configured correctly but still not connecting,** on some versions of Linux you will need to remove the line "system-ca-certs=true" from the configuration file /etc/NetworkManager/system-connections/eduroam, you will need to perform this change logged in as root user.

## Device specific

- **I am using a Dell Mini 9 or 10, and it crashes when connecting to eduroam.**

There is an issue with the Dell Minis connecting to WPA2. To resolve this, ensure that you have the latest updates installed by running 'apt-get upgrade'. For further information, there is a discussion of the issue on the Dell forums, <https://bugs.launchpad.net/dell-mini/+bug/300784>