



## Configuring a wireless connection: Windows Vista – eduroam & ResNet

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FS WN01 Vista

**Use this Fact Sheet to configure a Vista-based PC or laptop** to connect to the wireless services *eduroam* and *ResNet*<sup>1</sup>. Note that a Quick install is also available, allowing you to configure your PC or laptop automatically – see [www.abdn.ac.uk/wireless/help/windows.shtml](http://www.abdn.ac.uk/wireless/help/windows.shtml)

**eduroam** provides staff and students using a laptop or PDA with authenticated access to the University of Aberdeen's wireless network. It also permits access to wireless networks at other participating institutions. All that is required is a University of Aberdeen user name and password.

Visitors from participating institutions (see [www.eduroam.ac.uk](http://www.eduroam.ac.uk)) can access the University of Aberdeen wireless network using credentials provided by their home organisation.

**ResNet** provides students with a room-level service in University of Aberdeen Halls of Residence. This is an extended service geared towards social use.

### Which service should I use?

- The recommended default wireless service for all staff and students is *eduroam*.
- *ResNet* can be used by students who are resident in University Halls (Hillhead, Crombie Johnston, Elphinstone Road) when on site at these locations. When on campus, students should use *eduroam*.

You can set up your laptop to automatically switch between the two services, see section 2.

### Before you start

Before you connect to any of our wireless services, we recommend you check the following:

- You have a current University of Aberdeen username and password.
- You are running Windows Vista.
- You have administrator rights on your laptop or PC.
- You have built-in wireless capability or have purchased and installed a wireless network adapter. The adapter must support WPA2 encryption. If your adapter is a few years old, you may need to check the manufacturer's website and download more recent drivers for your adapter.
- You have up-to-date anti-virus software, and up-to-date wireless adapter drivers.

**Note:** When connecting to our wireless services, you are bound by our *Terms & Conditions for using IT Facilities* – [www.abdn.ac.uk/dit/policy](http://www.abdn.ac.uk/dit/policy) - and our *Wireless Conditions of Use* – [www.abdn.ac.uk/wireless/guidelines.shtml](http://www.abdn.ac.uk/wireless/guidelines.shtml). ResNet users should also read the guidelines at [www.abdn.ac.uk/wireless/resnet-guidelines.shtml](http://www.abdn.ac.uk/wireless/resnet-guidelines.shtml).

### Trouble connecting to eduroam or ResNet?

1. Check that you have entered the correct username and password.
2. Ensure you follow **all** the instructions on this Fact Sheet.
3. Check that you have set your browser's proxy settings as in section 1.4
4. Make sure that IPv6 is disabled in the wireless adapter's IP configuration.
  - Click on the **Start** button and type **ncpa.cpl** into the **Start Search** text box, then press the **Enter** key. The **Network Connections** dialog opens.
  - Right click on **Wireless Network Connection** and select **Properties** from the pop-up menu. The **Wireless Network Connection Properties** dialog opens.
  - Under the **Networking** tab, untick the **Internet Protocol Version 6 (TCP/IPv6)** checkbox, then click **OK** and close the Network Connections dialog
5. If your laptop still fails to connect, return to the **Protected EAP properties** dialog (see p. 3) and *untick* the **Validate server certificate** checkbox.

Still having trouble? contact the Service Desk – e-mail: [servicedesk@abdn.ac.uk](mailto:servicedesk@abdn.ac.uk), tel: (27)3636. Or see our wireless web pages – [www.abdn.ac.uk/wireless/help](http://www.abdn.ac.uk/wireless/help)

<sup>1</sup> When connecting, you will also see the uoa-corporate service. This is not available for general access.

## 1. Adding a University wireless network and logging on

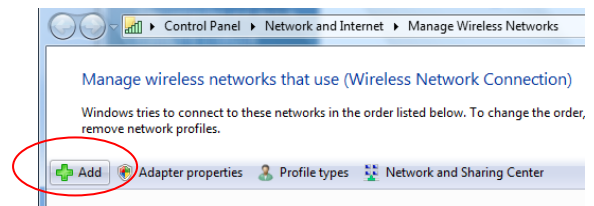
You will need to repeat steps 1.1 to 1.3 for each of the University's named wireless services (*eduroam* or *ResNet*) that you wish to connect to.

### 1.1 Open the Manage Wireless Networks window

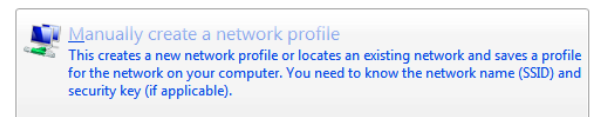
- Go to **Start > Control Panel > Network and Internet > Network and Sharing Center**
- From the menu on the left hand side of the Network and Sharing Center window, click on the link **Manage wireless networks**

### 1.2 Manually add a named wireless network

- In the Manage Wireless Networks window, click on the **Add** button



- Click on **Manually create a network profile**

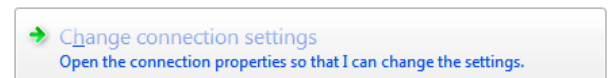
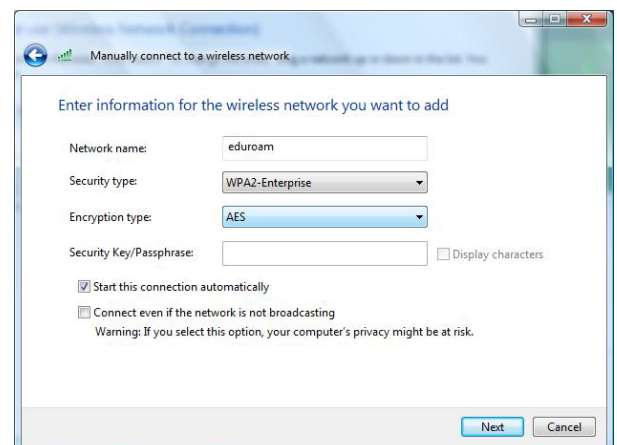


The **Manually connect to a wireless network** window opens.

- In the **Network name** text box, type *eduroam* (or *resnet*) in lower case
- For **Security type**, select *WPA2-Enterprise* from the drop down option menu
- Ensure **Encryption type** is *AES*
- Ensure the **Start this connection automatically** checkbox is *ticked*

**Note:** the network name that you type here is case sensitive, and **must appear all lower case**, (i.e. *eduroam* or *resnet*)

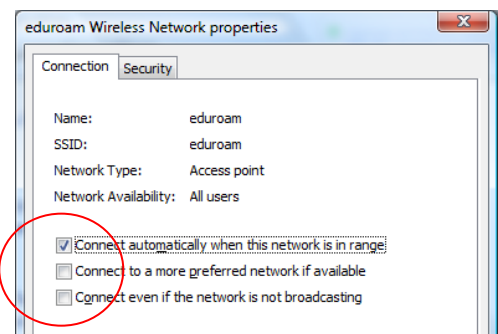
- Click on the **Next** button.
- Click on **Change connection settings**



The **eduroam Wireless Network properties** dialog opens.

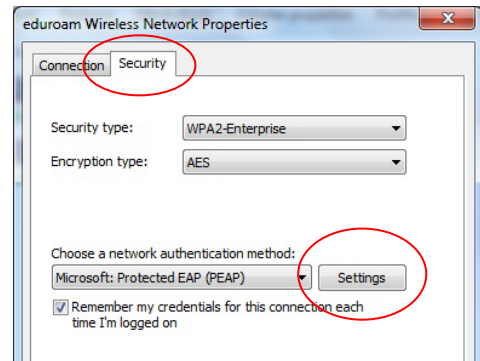
Ensure that

- the **Connect automatically when this network is in range** checkbox is *ticked*
- the **Connect to a more preferred network if available** checkbox is *unticked*
- the **Connect even if the network is not broadcasting** checkbox is *unticked*.



- Click on the **Security** tab at the top of the eduroam Wireless Network properties dialog.
- Ensure

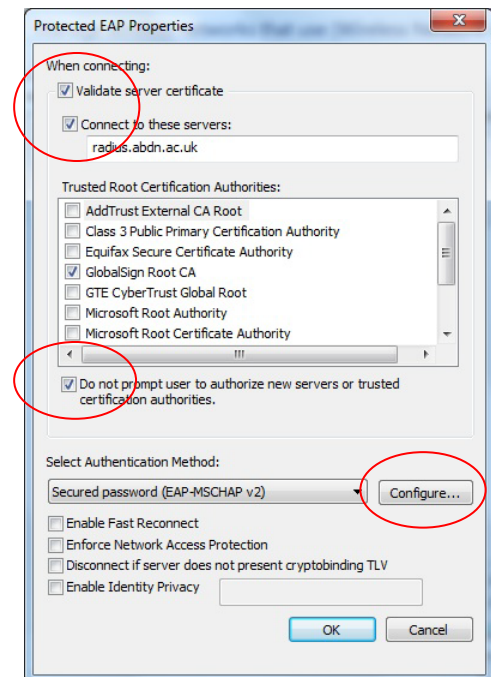
- the **Security type** is set to *WPA2-Enterprise*
- the **Encryption type** is set to *AES*
- that *Protected EAP (PEAP)* is selected under the **Choose a network authentication method** options
- the **Cache user information for subsequent connections to this network** checkbox is *ticked*
- Click on the **Settings...** button



The **Protected EAP Properties** dialog opens.

Under **When connecting**, ensure

- the **Validate server certificate** checkbox is *ticked*
- the **Connect to these servers** checkbox is ticked and type *radius.abdn.ac.uk* in the box below
- Under **Trusted Root Certification Authorities**, tick the checkbox against any entries for **GlobalSign**
- the **Do not prompt user to authorize new servers or trusted certification authorities** checkbox is ticked

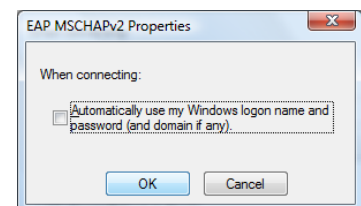


Under **Select Authentication Method**

- ensure **Secured password (EAP-MSCHAP v2)** is *selected*
- *untick* the **Enable Fast Reconnect** checkbox and leave the remaining two checkboxes *unticked*
- Click on the **Configure...** button.

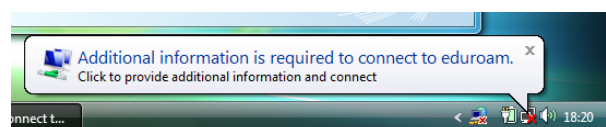
The **EAP MSCHAPv2 Properties** dialog opens.

- *untick* the **Automatically use my Windows logon name and password (and domain if any)** checkbox.
- Click **OK**
- Click **OK** again to return to the **eduroam Wireless network properties** dialog
- Click **OK** to return to the **Manually connect to a wireless network** dialog



Wait a few seconds and your laptop will display an information balloon in the toolbar (lower right of screen) asking for more information. Don't worry if you miss it – it will reappear in 50-60 seconds!

- Click once on the info balloon
- The **Enter Credentials** dialog opens.



### 1.3 Logging on to the network for the first time

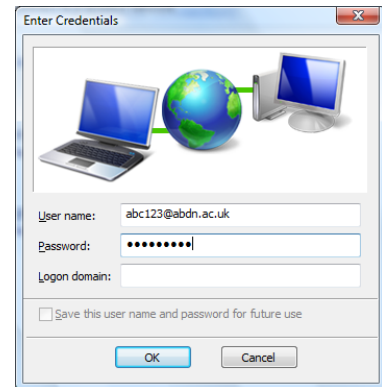
In the **Enter Credentials** dialog

Log on with your usual username and password:

- **Username:** *username@abdn.ac.uk*

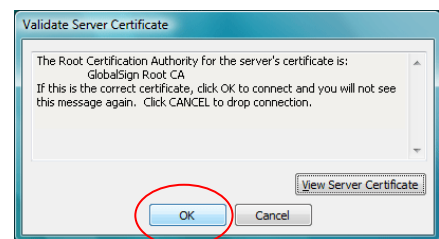
**Note:** you must append **@abdn.ac.uk** to your username, e.g. *abc123* becomes *abc123@abdn.ac.uk*

- **Password:** *your usual University password*
- **Logon domain:** [leave this part blank]
- Click **OK**



Wait a few seconds and the information balloon will reappear.

- Click on it once to open the **Validate Server Certificate** dialog
- Click **OK** to validate the certificate



You will then be connected to *eduroam* (or *ResNet*). This may take up to 30 seconds depending on network traffic.

**Note:** You will only need to log on with your *username@abdn.ac.uk* and password and to verify the certificate the first time you connect to either *eduroam* or *ResNet*. Thereafter, Windows will remember your password, and you can connect automatically.

- Close any remaining windows
- You will stay connected while you remain in range of the wireless network. If you wish to disconnect, or connect to a different network, see section 3 below.

**Now, follow the steps in Section 1.4 (below) to set your browser proxy settings.**

**If you don't set the proxy, you will not be able to connect to the internet.**

### 1.4 Setting your browser proxy settings

**If you don't set the proxy, you will not be able to connect to the internet.** The following instructions are for Internet Explorer 7 and later; for other browsers, see [www.abdn.ac.uk/proxy](http://www.abdn.ac.uk/proxy)

**Automatically detect settings** – try this first

- Open Internet Explorer and go to *Tools > Internet Options*
- Click on *Connections* tab, then click on the *LAN settings* button
- **Tick** *Automatically detect settings*
- Click *OK* until all windows are closed
- Close Internet Explorer and re-open before attempting to browse the Web

If you are still unable to connect to the internet, try using the automatic configuration script:

**Use Automatic Configuration script**

- Open Internet Explorer and go to *Tools > Internet Options*

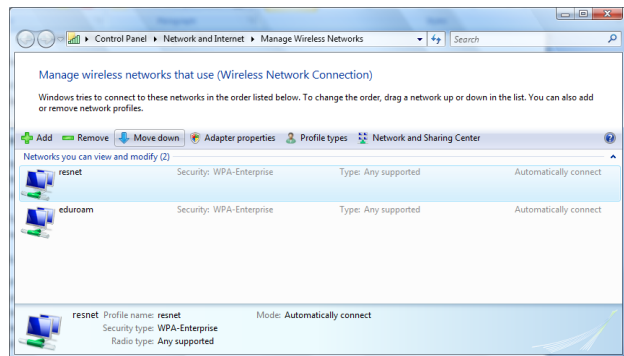
- Click on *Connections* tab, then click on the *LAN settings* button
- **Untick** *Automatically detect settings*
- **Tick** *Use automatic configuration script*
- In the *Address* text box, type **http://www.abdn.ac.uk/local/autoproxy.php**
- Click *OK* until all windows are closed
- Close Internet Explorer and re-open before attempting to browse the Web

If you are still unable to connect to the internet, please contact the Service Desk. Note that if you connect your computer to a network outside the University (e.g. home, café) you may need to remove the proxy settings you have just entered.

## 2. Order of preferred networks

If more than one wireless signal is in range, you can choose which one you wish your laptop to connect to automatically. This is useful if you move between locations where both *eduroam* and *ResNet* are available.

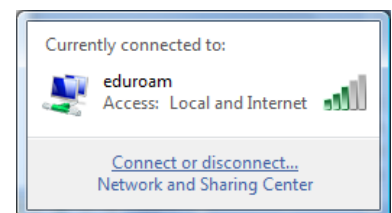
- Return to the **Network and Sharing Center** window (**Start > Control Panel > Network and Internet > Network and Sharing Center**, then click on the link to **Manage wireless networks**)
- The network at the top of the list is the one that you will be automatically connected to when you are in range.
- To change the order of your list, select a network and use the **Move down** or **Move up** button.
- Close the **Manage Wireless Networks** dialog
- Close the **Network and Sharing Center** dialog



## 3. To manually disconnect and connect to a wireless network

When you want to manually disconnect from or connect to the a wireless network

- click once on the wireless network icon on your status bar
- select **Connect or disconnect...** from the pop-up window



From the resulting window, you can choose to disconnect, connect, or connect to another network.

When you are disconnected from the wireless network, the wireless icon on your status bar will have a cross through it.



**Note:** Regardless of whether you have disconnected from the wireless network before you shut down your laptop, the next time you restart, it will automatically detect and connect to the wireless network. If you have configured your laptop for more than one wireless network, e.g. *eduroam* and *resnet*, you will be connected to your preferred network as selected by you in Section 2 above.