



Configuring a wireless connection: Windows 7 – eduroam & ResNet

Anita Williams, and DIT Documentation Team. Updated July 2011.

FS WN01 Windows 7

Use this Fact Sheet to configure a Windows 7-based PC or laptop to connect to the wireless services *eduroam* and *ResNet*¹.

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) 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*.

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 7.
- You have administrator rights on your laptop or PC.
- 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 - and our *Wireless Conditions of Use* – www.abdn.ac.uk/wireless/guidelines.shtml. ResNet users should also read the guidelines at www.abdn.ac.uk/wireless/resnet-guidelines.shtml.

Trouble connecting to eduroam or ResNet?

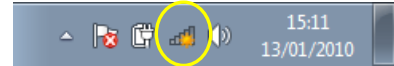
1. Check that you have entered the correct username and password.
2. Ensure you **follow all the instructions** on this Fact Sheet.
If you are unable to connect to the wireless network *automatically* (as described in section 1), you may need to connect *manually*. See Appendix on page 5 for instructions on how to do this.
3. Check that you have set **your browser's proxy settings** as in Section 2.
4. Make sure that IPv6 is disabled in the wireless adapter's IP configuration.
 - Click on the **Wireless** icon on the right of the screen and select **Open Network & Sharing Center** from the pop-up window. Click on the **Manage wireless networks** link.
 - Click on the **Adapter properties** tab. 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 **Manage wireless networks** dialog.

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

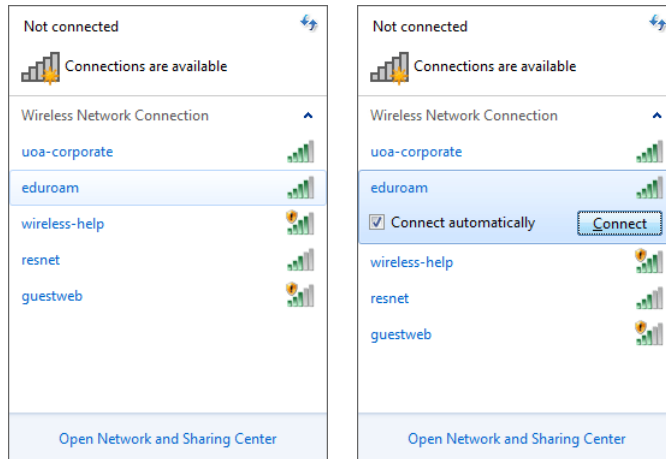
¹ When connecting, you will also see the uoa-corporate service. This is not available for general access.

1. Connecting to the wireless network automatically

- Click once on the **Wireless** icon on the right of the screen
- To connect to *eduroam* or *ResNet*:



- Click on **eduroam** (or **resnet**) to select it from the list of available networks.
- Click **Connect** – leave the **Connect automatically** checkbox ticked if you don't want to type in your login details each time you connect to the wireless network.



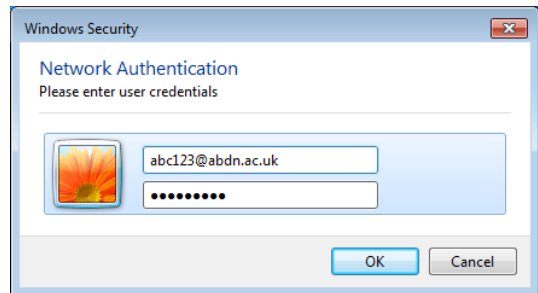
- The **Connecting to eduroam...** (or **Connecting to resnet**) dialog appears briefly while Windows detects the security settings for the *eduroam* (or *resnet*) wireless network.
- The **Windows Security** dialog opens.

You will be prompted for your credentials. Log on with *your* usual username and password, e.g.:

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

Note:

Your username is what you use to login to University networked PCs (e.g. classroom or office desktop PCs). It is **not** your e-mail address. You must append **@abdn.ac.uk** to *your* username, e.g. *abc123* becomes *abc123@abdn.ac.uk*



- **Password:** *your* usual University password
- Click **OK**

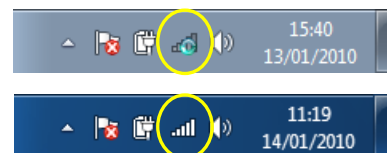
Note: You will only need to log on with your *username@abdn.ac.uk* and password and to verify the certificate the first time you connect to either *eduroam* or *ResNet*. Thereafter, Windows will remember your password, and you can connect automatically.

- The first time you connect, you will be presented with a **Windows Security Alert**:
 - Click **Details** – ensure Radius Server is **radius.abdn.ac.uk** and Root CA is **GlobalSign Root CA**
 - Click on **Connect** to continue
 - If prompted to **Set Network Location**, select **Work** then **Close** the dialog.



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

- During this time the **Wireless** icon will display an animated blue circle.
- Once connected, the icon will change to display solid white bars; these indicate the signal strength at your current location.
- You will stay connected while you remain in range of the wireless network. If you wish to disconnect, or connect to a different network, click once on the **Wireless** icon on the right of the screen and disconnect from your current network, then select a different network and click on **Connect**.



Not connected?

If you are unable to connect to the wireless network automatically, you may need to connect manually. See Appendix on page 4 for instructions on how to do this.

**Now follow the steps in Section 2 to set up your browser's proxy settings.
Without these, you will not be able to browse the internet.**

2. 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 8 and 7; for other browsers, see 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.

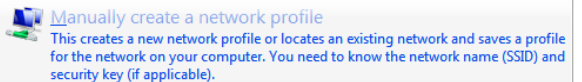
Appendix: Connecting to the wireless network manually

If you are unable to connect to the wireless network automatically, as in section 1 above, you may need to configure your laptop manually.

- Click once on the **Wireless** icon on the right of the screen
- Select **Open Network and Sharing Center** from the pop-up window
- Click on the link **Manage wireless networks** on the left of the window
- Click **Add**
- Click **Manually create a network profile**



[Open Network and Sharing Center](#)



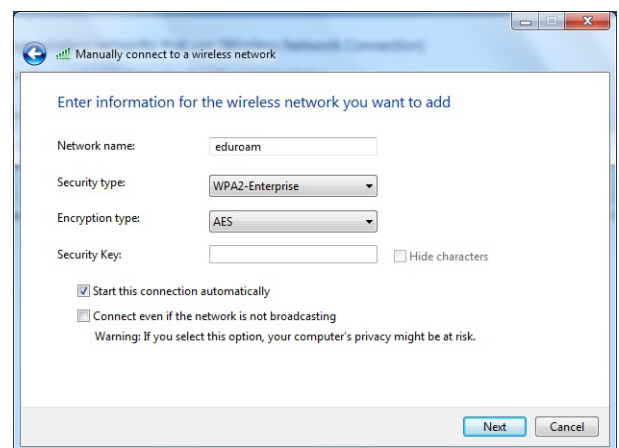
Manually create a network profile
This creates a new network profile or locates an existing network and saves a profile for the network on your computer. You need to know the network name (SSID) and security key (if applicable).

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.



Manually connect to a wireless network

Enter information for the wireless network you want to add

Network name:

Security type:

Encryption type:

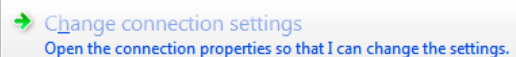
Security Key: Hide characters

Start this connection automatically

Connect even if the network is not broadcasting

Warning: If you select this option, your computer's privacy might be at risk.

- Click on **Change connection settings**

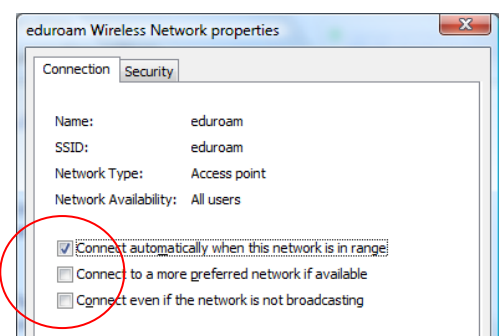


[Change connection settings](#)
Open the connection properties so that I can change the settings.

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

Ensure that

- the **Connect automatically when this network is in range** checkbox is *ticked*
- the other checkboxes should be *unticked*



eduroam Wireless Network properties

Connection Security

Name: eduroam

SSID: eduroam

Network Type: Access point

Network Availability: All users

Connect automatically when this network is in range

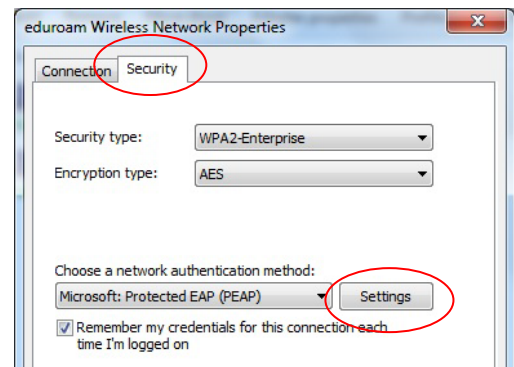
Connect to a more preferred network if available

Connect even if the network is not broadcasting

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

Ensure

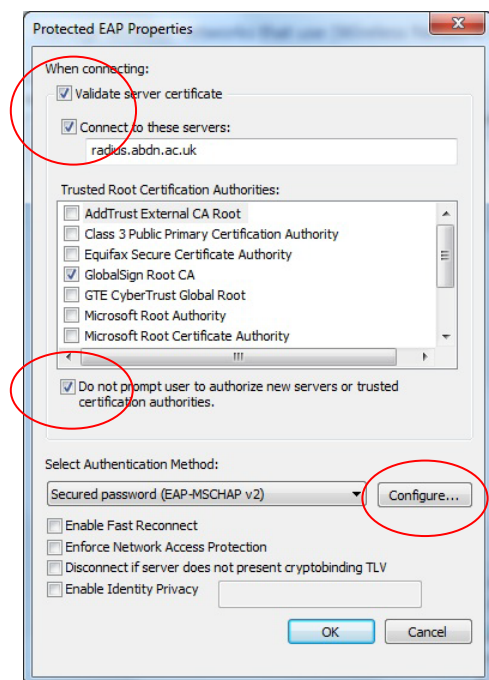
- the **Security type** is set to **WPA2-Enterprise**
- the **Encryption type** is set to **AES**
- that **Microsoft Protected EAP (PEAP)** is selected under the **Choose a network authentication method** options
- the **Remember my credentials for this connection...** checkbox is *ticked*
- Click on 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

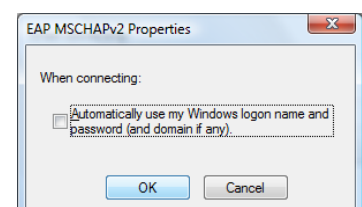


Under **Select Authentication Method**

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

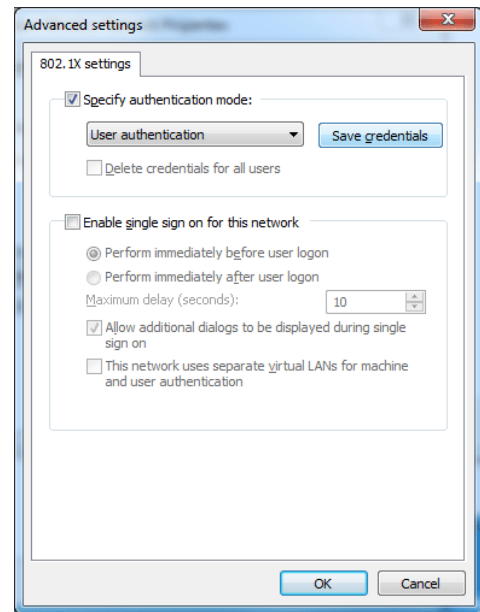
The **EAP MSCHAPv2 Properties** dialog opens.

- *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 on **Advanced** settings



The **Advanced settings** dialog opens.

- Tick the **Specify authentication mode** checkbox
- Select **User authentication** from the drop down menu
- Click on **Save credentials**



– The **Save Credentials** dialog opens.

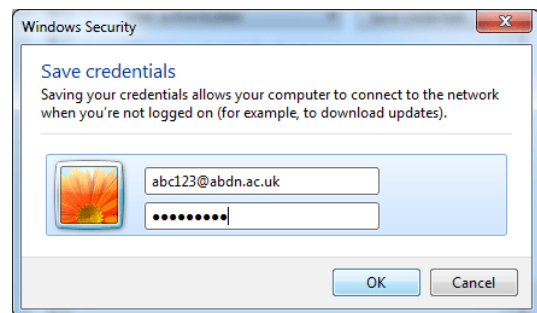
- o Enter your **Username:**
yourusername@abdn.ac.uk

Note:

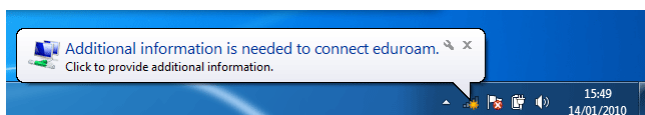
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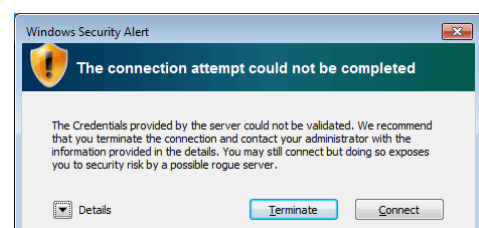
- o **Password:** your usual University password
- o Click **OK**
- o Click on **OK** to return to the eduroam Wireless network properties dialog
- o Click **OK** and **Close**



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



- Click once on the information balloon
- You will be presented with a **Windows Security Alert**
 - o Click **Details** – ensure Radius Server is **radius.abdn.ac.uk** and Root CA is **GlobalSign Root CA**
 - o Click on **Connect** to continue



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

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