



# VUBnext manual configuration

Latest Update 30/03/2017

# **General Information**

In some cases it might not be possible to use the normal setup.

- > You are using a corporate laptop with very tight restrictions. In this case, your device will most probably try to authenticate on VUBnext or eduroam with your pre-configured corporate login
- You're trying to configure the laptop in a place where there is no or barely any wireless signal coming through
- You're using a very specific flavour of Windows where the possibility of specifying your credentials does not work
- ۶..

In any of these case, you might want or need to configure the wireless network manually. Just two extra points to keep in mind:

- If your login fails repeatedly, your password may not be correctly stored in the wireless database. Go to http://helpdesk.vub.ac.be/ then choose Personal Account Manager from the left-side menu and change your password. You can use the same as before if it still complies with the latest rules for password complexity.
- In some cases a driver update of your wireless network card is needed to fully support the WPA2 encryption we use.

# Step by Step configuration

Right-click the Network Connections icon in your icon tray. Select Open Network and Sharing Center. The left image comes from Windows 7, the right image from Windows 10.



In the main window, choose Set up a new connection or network.

#### Windows 7

| Network and In                                      | ernet  Network and Sharing Center  |
|---|--|
| Control Panel Home                                  | View your basic network information and set up connections   |
| Manage wireless networks<br>Change adapter settings | RCPC7 Internet See full ma   |
| Change advanced sharing<br>settings                 | (This computer) View your active networks You are currently not connected to any networks.   |
|   | Change your networking settings  |
|   | Set up a new connection or network<br>Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point |
|   | Connect to a network   |
|   | Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.   |
| See also  | Choose homegroup and sharing options   |
| HomeGroup   | Access files and printers located on other network computers, or change sharing settings.  |
| 1.1   | Troubleshoot problems  |
| Internet Options                                    |  |

#### Windows 10

| 辈 Net       | Network and Sharing Center  |   |  |  |  |  |
|-------------|---|---|--|--|--|--|
| ← -         | in -> 💉 🛧 💺 > Control Panel > Network and Internet > Network and Sharing Center |   |  |  |  |  |
| Cor         | Control Panel Home View your basic network information and set up connections   |   |  |  |  |  |
| Cha         | ange adapter settings   | adapter settings View your active networks Vou are currently not connected to any networks. |  |  |  |  |
| Cha<br>sett | ange advanced sharing<br>tings  | Change your networking settings   |  |  |  |  |
|             |   | Set up a new connection or network  |  |  |  |  |
|             |   | Set up a broadband, dial-up, or VPN connection; or set up a router or access point.         |  |  |  |  |
|             |   | Troubleshoot problems   |  |  |  |  |
|             |   | Diagnose and repair network problems, or get troubleshooting information.                   |  |  |  |  |
|             |   |   |  |  |  |  |
|             |   |   |  |  |  |  |
|             |   |   |  |  |  |  |
|             |   |   |  |  |  |  |
|             |   |   |  |  |  |  |
|             |   |   |  |  |  |  |
|             |   |   |  |  |  |  |
| See         | also  |   |  |  |  |  |
| Hor         | meGroup   |   |  |  |  |  |
| Infr        | rared   |   |  |  |  |  |
| Win         | adows Firewall  |   |  |  |  |  |
| vvii        | nows i newali   |   |  |  |  |  |

Choose to Manually Connect to a wireless network and press Next.

#### Windows 7

| hoose a connection option   |  |
|---|--|
| Connect to the Internet<br>Set up a wireless, broadband, or dial-up connection to the Internet.         |  |
| Set up a new network<br>Configure a new router or access point.   |  |
| Manually connect to a wireless network<br>Connect to a hidden network or create a new wireless profile. |  |
| Connect to a workplace<br>Set up a dial-up or VPN connection to your workplace.                         |  |
| Set up a dial-up connection<br>Connect to the Internet using a dial-up connection.                      |  |

|   |   | _            |     | ×    |
|---|---|--------------|-----|------|
| ~ | 攣 Set Up a Connection or Network  |              |     |      |
|   |   |              |     |      |
|   | Choose a connection option  |              |     |      |
|   |   |              |     | _    |
|   | Connect to the Internet<br>Set up a broadband or dial-up connection to the Internet.                    |              |     |      |
|   | Set up a new network<br>Set up a new router or access point.  |              |     |      |
|   | Manually connect to a wireless network<br>Connect to a hidden network or create a new wireless profile. |              |     |      |
|   | Set up a dial-up or VPN connection to your workplace.   |              |     |      |
|   |   |              |     |      |
|   |   |              |     | ]    |
|   |   | <u>N</u> ext | Car | ncel |

Insert the Network name VUBnext (Case sensitive) or eduroam, choose Security type WPA2-Enterprise and Encryption Type AES. Press next.

#### Windows 7

| Enter mormation        | for the wheless network you want to add                       |  |
|------------------------|---|--|
| N <u>e</u> twork name: | VUBnext   |  |
| Security type:         | WPA2-Enterprise   |  |
| Encryption type:       | AES 💌   |  |
| Se <u>c</u> urity Key: | Hide characters   |  |
| ✓ Start this conner    | ction automatically   |  |
| Connect even if        | the network is not broadcasting                               |  |
| Warning: If you        | select this option, your computer's privacy might be at risk. |  |

|   |                           |   | _             |    | ×    |
|---|---------------------------|---|---------------|----|------|
| ~ | 👰 Manually connect to a w | ireless network                                   |               |    |      |
|   |                           |   |               |    |      |
|   | Enter information for     | the wireless network you want to add              |               |    |      |
|   | Network name:             | VUBnext   |               |    |      |
|   | -                         |   |               |    |      |
|   | Security type:            | WPA2-Enterprise 🗸 🗸                               |               |    |      |
|   | Encryption type:          | AES ~   |               |    |      |
|   | Se <u>c</u> urity Key:    | <u>H</u> ide ch                                   | aracters      |    |      |
|   | Start this connection     | automatically                                     |               |    |      |
|   | Connect even if the n     | etwork is not broadcasting                        |               |    |      |
|   | Warning: If you selec     | t this option, your computer's privacy might be a | t risk.       |    |      |
|   |                           |   |               |    |      |
|   |                           |   |               |    |      |
|   |                           |   | Mart          |    |      |
|   |                           |   | <u>IN</u> ext | Ca | ncei |

Click on Change connection settings.

|  |               | _ |       | × |
|--|---------------|---|-------|---|
| <ul> <li>Manually connect to a wireless network</li> </ul> |               |   |       |   |
|  |               |   |       |   |
| Successfully added VUBnext                                 |               |   |       |   |
|  |               |   |       |   |
| $\rightarrow$ Change connection settings                   |               |   |       |   |
| Open the connection properties so that I can change        | the settings. |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   |       |   |
|  |               |   | Close | 2 |
|  |               |   |       |   |

Leave the settings as they are (or add Connect to a more preferred network if available) and select the Security tab. Press Settings.

#### Windows 7

| /UBnet Wireless Networ                                   | rk Properties 📃  | VI | UBnet Wireless Netw   | ork Properties  |
|--|--|----|---|---|
| Connection Security                                      |  | _  | Connection Security   | <u> </u>  |
| Name:<br>SSID:<br>Network type:<br>Network availability: | VUBnet<br>VUBnet<br>Access point<br>All users  |    | S <u>e</u> curity type:<br>E <u>n</u> cryption type:                                      | WPA2-Enterprise   |
| Connect automatic  | ally when this network is in range<br>preferred network if available<br>ne network is not broadcasting its name (SSID)<br>nection settings |    | Ch <u>o</u> ose a network a<br>Microsoft: Protecte<br>Remember my cr<br>time I'm logged c | euthentication method:<br>ed EAP (PEAP)   Equation Section Each<br>phone gs |
|  | OK Cancel  |    |   | OK Cancel   |

| VUBnext Wireless Network Properties X  | VUBnext Wireless Network Properties X   |
|--|---|
| Connection Security  | Connection Security   |
| Name: VUBnext SSID: VUBnext Network type: Access point Network availability: All users          Connect automatically when this network is in range         Look for other wireless networks while connected to this network         Cgnnect even if the network is not broadcasting its name (SSID) | Security type:       WPA2-Enterprise         Encryption type:       AES         Choose a network authentication method:       Settings         Microsoft: Protected EAP (PEAP)       Settings         Remember my credentials for this connection each time I'm logged on       Advanced settings |
| OK Cancel  | OK Cancel   |

Remove the option to Validate Server Certificate. Press Configure.

#### Windows 7 / Windows 10

| Protected EAP Properties  | Protected EAP Properties X  |
|---|---|
| When connecting:         Validate server certificate         Connect to these servers:         Trusted Root Certification Authorities:         Class 3 Public Primary Certification Authority         Entrust.net Certification Authority (2048)         Entrust.net Certification Authority (2048)         Equifax Secure Certificate Authority         Generic Root Trust CA         GTE CyberTrust Global Root         Microsoft Root Authority         Image: Construct Calibration Authority         Do not prompt user to authorize new servers or trusted certification authorities. | When connecting:           Verify the server's identity by validating the certificate           Cgnnect to these servers (examples:srv1;srv2;.*\.srv3\.com):           Trusted Root Certification Authorities:           AddTrust External CA Root           Baltimore CyberTrust Root           Class 3 Public Primary Certification Authority           COMODO RSA Certification Authority           COMODO RSA Code Signing CA           DigiCert Assured ID Root CA           Verifications before connecting:           Tell user if the server's identity can't be verified |
| Select Authentication Method:<br>Secured password (EAP-MSCHAP v2)  Configure Fanable East Reconnect Enforce Network Access Protection Disconnect if server does not present cryptobinding TLV Enable Identity Privacy OK Cancel   | Select Authentication Method:<br>Secured password (EAP-MSCHAP v2)<br>Enable East Reconnect<br>Disconnect if server does not present cryptobinding TLV<br>Enable Identity Privacy<br>OK Cancel   |

Disable the setting "Remove the option to Automatically use Windows logon name and password" is disabled.

| EAP MSCHAPv2 Properties   | EAP MSCHAPv2 Properties X   |  |
|---|---|--|
| When connecting:  | When connecting:  |  |
| Automatically use my Windows logon name and password (and domain if any). | Automatically use my Windows logon name and password (and domain if any). |  |
| OK Cancel   | OK Cancel   |  |

Press OK to close this window.

Press OK to close the window Protected EAP Properties.

Select the Advanced Settings.

#### Windows 7 / Windows 10

| VUBnet Wireless Network Properties   |                                       | VUBnext Wireless Network Properties   | ×            |
|--|---------------------------------------|---|--------------|
| Connection Security  | ]]                                    | Connection Security   |              |
| S <u>e</u> curity type:<br>E <u>n</u> cryption type:                             | WPA2-Enterprise   AES                 | Security type: WPA2-Enterprise<br>Encryption type: AES  | ~            |
| Choose a network a<br>Microsoft: Protecte<br>Remember my cr<br>time I'm logged c | uthentication method:<br>d EAP (PEAP) | Chgose a network authentication method:<br>Microsoft: Protected EAP (PEAP) V Set<br>Remember my credentials for this connection eac<br>time I'm logged on | ttings<br>ch |
| Advanced setting   | <b>J</b> 2                            | Advanced settings   |              |
|  | OK Cancel                             | ОК  | Cancel       |

Select to Specify authentication mode. Choose User authentication. Select Save credentials.

# Windows 7 / Windows 10

| dvanced settings   | Advanced settings   |  |  |
|--|---|--|--|
| 802.1X settings 802.11 settings  | 802. 1X settings 802. 11 settings   |  |  |
| Specify authentication mode:   | Specify authentication mode:  |  |  |
| User authentication    Save gredentials  | User authentication $\checkmark$ Save gredentials                                     |  |  |
| Delete credentials for all users   | Delete credentials for all users  |  |  |
| Enable single sign on for this network   | Enable single sign on for this network  |  |  |
| Perform immediately before user logon  | Perform immediately before user logon   |  |  |
| Perform immediately after user logon   | O Perform immediately after user logon  |  |  |
| Maximum delay (seconds):   | Maximum delay (seconds):  |  |  |
| I Allow additional dialogs to be displayed during single sign on               | Allow additional dialogs to be displayed during single sign on                        |  |  |
| This network uses separate virtual LANs for machine<br>and user authentication | This network uses separate <u>virtual LANs</u> for machine<br>and user authentication |  |  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |
|  |   |  |  |
| OK Cancel  |   |  |  |
| Calice   | OK Cancel   |  |  |

Now enter your credentials.

For VUBnet this is your NetID and password. For Eduroam this is your NetID@domain. Now press OK and close all windows.

| indows Security                   |  |  |                      |
|-----------------------------------|--|--|----------------------|
| Save creder                       | ntials   |  |                      |
| Saving your cre<br>when you're no | dentials allows your c<br>It logged on (for exam | omputer to connect to<br>ple, to download updat  | the network<br>es).  |
|                                   | jvdmodal   |  |                      |
|                                   |  |  |                      |
|                                   |  | ОК   | Cancel               |
|                                   |  |  |                      |
| indows Security                   |  |  |                      |
| Save creder                       | ntials   |  |                      |
| Saving your cre<br>when you're no | dentials allows your c<br>to logged on (for exam | omputer to connect to<br>uple, to download updat | the network<br>:es). |
|                                   | ivdmodal@vub.ac.b                                | bel  |                      |
|                                   | •••••  |  |                      |
|                                   | •••••  |  | <u> </u>             |

| Windows Security   | × |  |  |  |  |
|--|---|--|--|--|--|
| Save credentials   |   |  |  |  |  |
| Saving your credentials allows your computer to connect to the network when you're not logged on (for example, to download updates). |   |  |  |  |  |
| jvdmodal   |   |  |  |  |  |
| ••••••   |   |  |  |  |  |
| OK Cancel  |   |  |  |  |  |
| Windows Security   | × |  |  |  |  |
| Save credentials   |   |  |  |  |  |
| Saving your credentials allows your computer to connect to the network when you're not logged on (for example, to download updates). |   |  |  |  |  |
|  |   |  |  |  |  |
| jvdmodal@vub.ac.be ×   |   |  |  |  |  |
| jvdmodal@vub.ac.be ×   |   |  |  |  |  |

The first you want to connect to either the VUBnext or the eduroam network, you will most likely need to accept a certificate. This is normal. We currently have no screenshot for Windows 7. You will need to click the wireless connections icon like you did before to open the list of wireless networks.

