SETTING UP

Windows XP machine to use 802.1x Authentication

University of Plovdiv is proud eduroam member!

Setting up Eduroam for users:

STEP 1

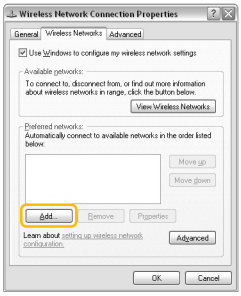
Right click on the **wireless connection icon** in the system tray (near the clock), and select **Open Network Connections**.

STEP 2

In the **Network Connections** window, again, right click on the wireless network connection and select **Properties**.

STEP 3

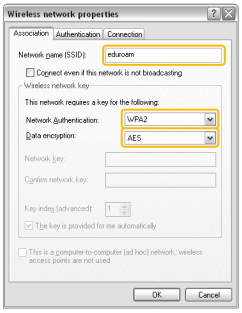
In the **Wireless Network** Connection Properties window, click on the Wireless Networks tab, **add** an entry into the Preferred networks section by clicking the Add button.



STEP 4

In the **Wireless network properties** window

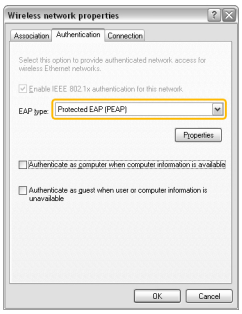
-Type in **eduroam** for the Network name (SSID).
-Select **WPA2** as the Network Authentication method.
-Select **AES** as the Data encryption method.



STEP 5

Next click on the **Authentication tab**

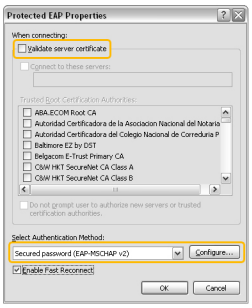
-Select **Protected EAP (PEAP)** from the drop down list for **EAP** Type:
-Make sure that all other check boxes are unselected.
-Click on the **Properties** button.



STEP 6

In the **Protected EAP Properties**

-Unselect the Validate server certificate check box.
-Select the Enable Fast Reconnect check box.
-Click on the **Configure** button.



STEP 7

Un-check the **Automatically use my Windows logon name and password** check box, and click OK.

To complete the configuration of the Preferred network click on the OK button until you're back at the Network Connections window.

STEP 8

Click on this bubble box to enter your username and password.

STEP 9

Type in your username, which for this service must include:

'username@youraddress.domain' like your e-Mail address.

Type in your password.

Click on OK.

Eduroam infrastructure

Eduroam technology is based on 802.1X standard and a hierarchy of RADIUS proxy servers.

The role of the RADIUS hierarchy is to forward the users' credentials to the users' home institution, where they can be verified and validated.

When a user requests authentication, the user's realm determines where the request is routed to. The realm is the suffix of the user-name, delimited with '@', and is derived from the organisation's DNS domain name.

Every institution (i.e. university or equivalent) that wants to participate in eduroam connects its institutional RADIUS-server to the national top-level RADIUS (NTLR) server of the country where the institution is located.

The NTLR is normally operated by the National Research and Education Network (NREN) of that country. These country-level servers have a complete list of the participating eduroam institutions in that country. This is sufficient to guarantee national roaming.

For international roaming, a regional top-level RADIUS server is needed in order to roam the users request to the right country. Currently there are two main regions where eduroam is deployed: Europe and Asia-Pacific.

In the case of Europe the top-level RADIUS server (ETLR) are operated by the Dutch NREN (SURFnet) and the Danish NREN (UNI-C).