irmacs
interdisciplinary research in the mathematical and computational sciences

Connecting to The IRMACS Wireless Network Using Windows XP with SP2

This document is intended to outline the steps necessary to connect a Windows XP laptop to the IRMACS wireless network. You will need administrator privileges on the laptop to implement these changes. This document only covers the situation where Windows is managing your wireless network and not the software supplied by the wireless network adapter's manufacturer.

Opening Network Connections control panel

In order to configure the wireless network, you will need to be logged on to your computer with administrator privileges. First must open the **Network Connections** control panel as shown in Figure 1, and select your **Wireless Network Connection** as shown in Figure 2.

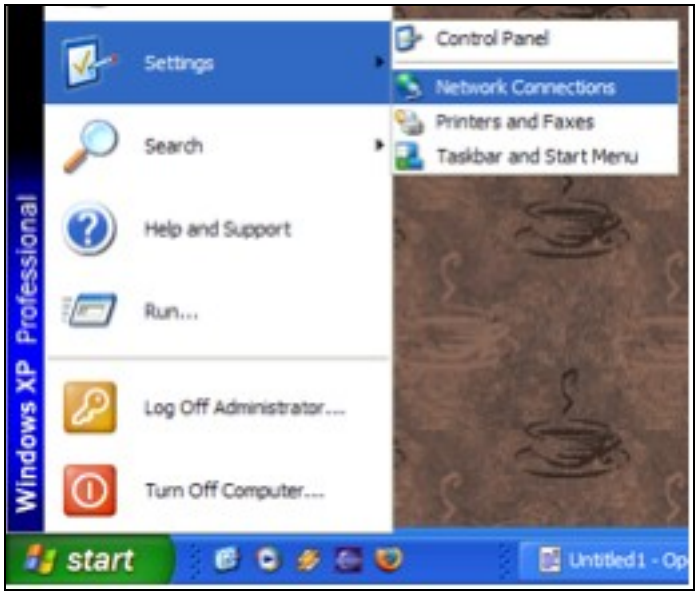

Figure 1: Getting to Network Connections Control Panel

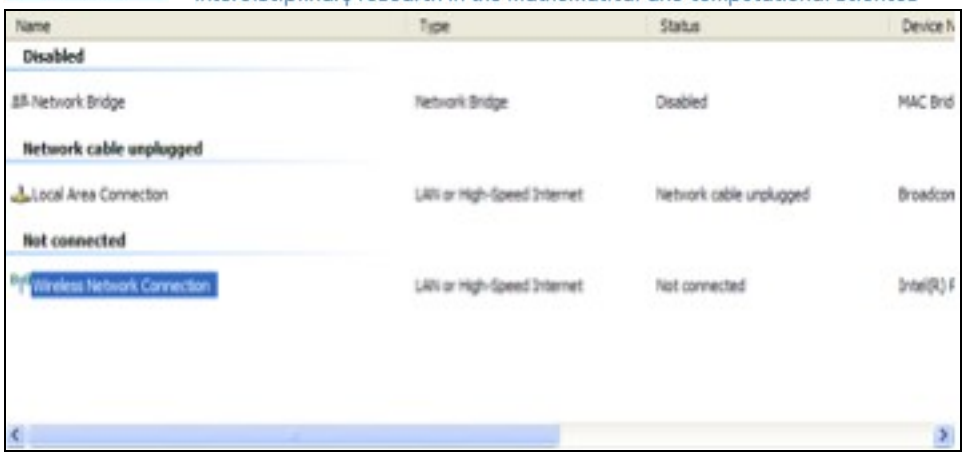

Figure 2: Select the Wireless Network Connection

Getting to the Wireless Properties

You will need to access and modify the properties for the Wireless network. Right click on the Network title and follow the menu to the **Properties**, as shown in Figure 3.

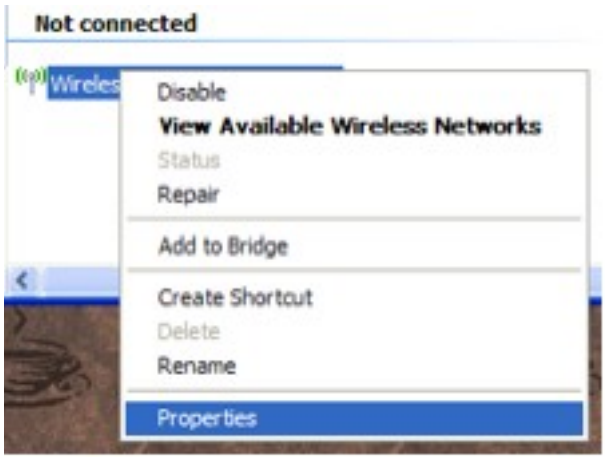

Figure 3: To get to Wireless Network Properties

Modifying the Irmacs Network Properties

If your computer has already detected the IRMACS network and it is listed in the Preferred Networks list, highlight it and click properties as illustrated in Figure 4, otherwise click the **Add…** button to add a new preferred network.

Figure 4: Accessing the Irmacs network settings

IRMACS Network Association

The first tab in the network properties, allows you to enter the Network Name (SSID). If your computer automatically detected it, it will already be set. In either case this should be set to Irmacs, as illustrated in Figure 5. Also ensure that the **Network Authentication** is set to ***Open***, and that **Data encryption** is set to *WEP*. Finally, there should be a check on **The key is provided for me automatically**.

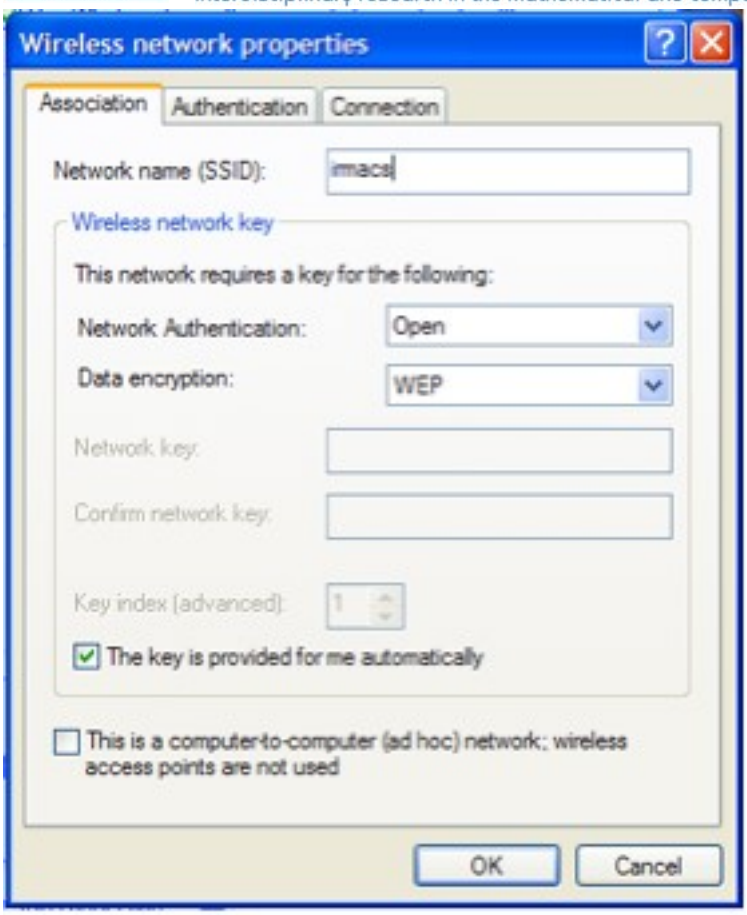

Figure 5: Association Settings

Irmacs authentication settings

The next tab is the authentication settings. Ensure there is a check beside **Enable IEEE 802.1x authentication**. You will also need to set the EAP type to a protocol that handles TTLS. If your system does not have SecureW2 installed, or another driver for the TTLS protocol you can download and install the free SecureW2 client from this website:

http://www.securew2.com/uk/

Select the TTLS client in the Authentication tab and click properties to configure the TTLS settings. Figure 6 displays the Authentication settings

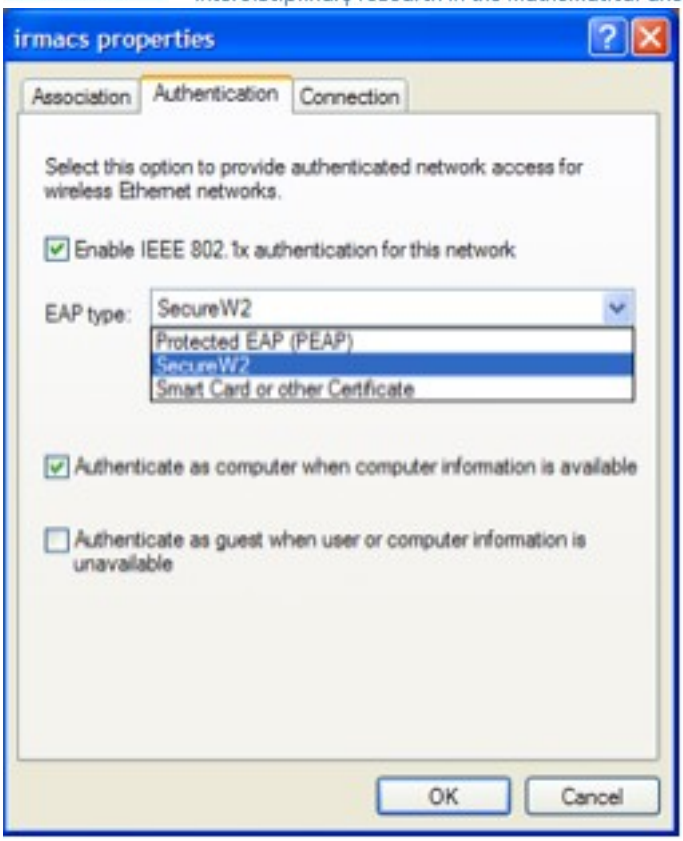

Figure 6: EAP type must be set to a client that handles TTLS

Once the correct client is selected, click on the **Properties** button to continue with configuration, as shown in Figure 7.

Figure 7: To access the TTLS settings you must click on Properties

TTLS Settings

There are a few settings to check in the SecureW2 Profile window. You may simply click **Configure** from the profile window that appears, shown in Figure 8.

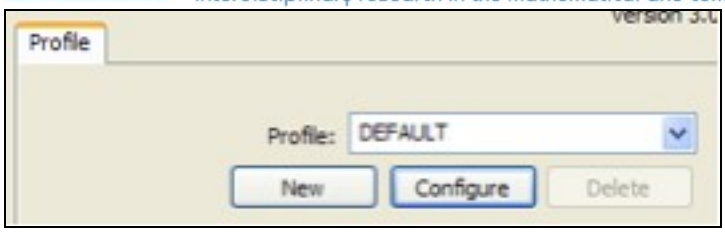

Figure 8: TTLS client configuration

TTLS Connection Setting

Under the Connection tab, illustrated in Figure 9, make sure there is no check beside **Use Alternate outer identity**.

Figure 9: Connection Tab

TTLS Certificates Tab

The next tab is the Certificates Tab; illustrated in Figure 10, ensure that there is no check beside “Verify server certificate”.

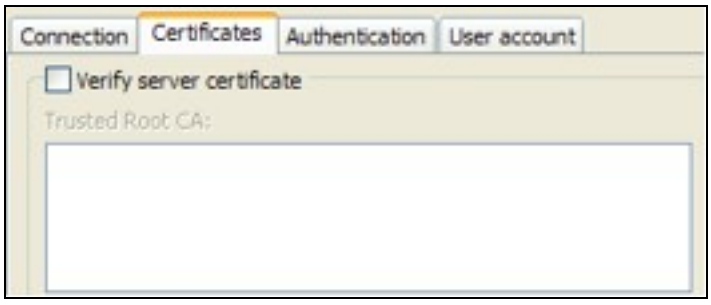

Figure 10: Certificates Tab

TTLS Authentication Tab

Under the Authentication tab ensure you have selected PAP Authentication Method, as shown in Figure 11.

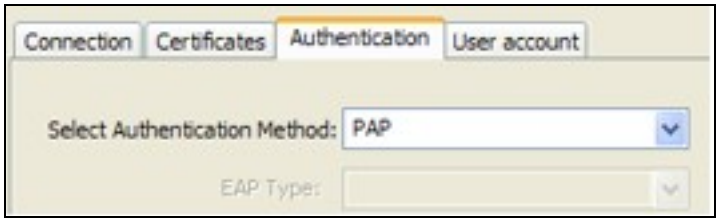

Figure 11: Authentication Tab

TTLS User Account Tab

The final tab provides a location for your username and password, as shown in Figure 12.

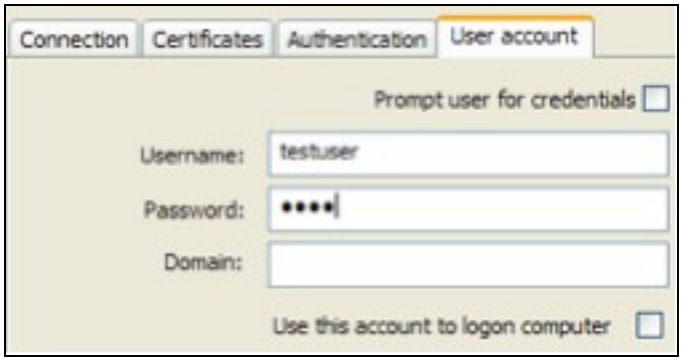

Figure 12: User Account Tab

Connecting Once Setup is Complete

To connect, click on the wireless device icon in the lower right hand corner of your screen and click on **View Available Networks**, as illustrated in Figure 13.

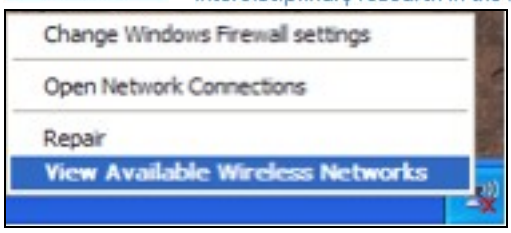

Figure 13: View Available Wireless Networks

Choose the IRMACS network, shown in Figure 14 and click on **Connect**

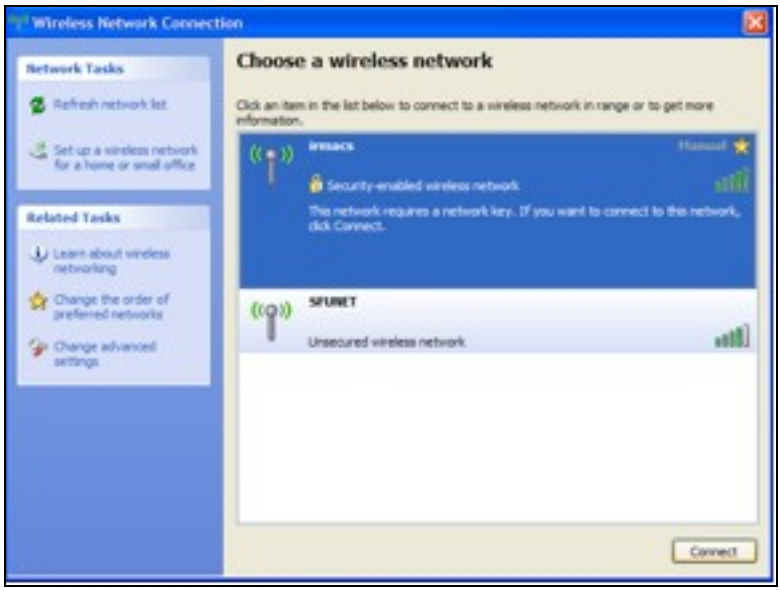

Figure 14: Choosing the IRMACS network

You should now be connected! Congratulations.

Troubleshooting Guide:

Q: I get an error that states that your computer cannot find a Certificate for this Network

A: This occurs if your firewall is blocking the certificate connection. We are trying to arrive at a solution, however for now, you can connect by turning off your firewall. You will still be protected by the IRMACS firewall, however we recommend you turn your firewall back on before you leave the facility.