

# 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

Name	Tipe	Status	Device N
Disabled			
島阜 Network Bridge	Network Bridge	Disabled	MAC Brid
Network cable unplugged			
Local Area Connection	LAN or High-Speed Internet	Network cable unplugged	Broadcon
Not connected			
Wineless Network Connection	LAN or High-Speed Internet	Not connected	Intel(R) F
(			2

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.

"" <u>Wreles</u>	Disable View Available Wireless Networks Status Repair
	Add to Bridge
	Create Shortout Delete Rename
	Properties

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.



Wirele:	ss Network Con	nection Properties 🛛 🛛 🛛 🔀
General	Wireless Networks	Advanced
Use V	Vindows to configur	e my wireless network settings
Availab	le networks:	
To con about v	nect to, disconnect vireless networks in	from, or find out more information range, click the button below.
		View Wireless Networks
i i i i i i i i i i i i i i i i i i i	nacs (Manual) Icon (Automatic)	Move up Move down
Leam a	Id Remo	ve Properties ess network Advanced
<u></u>		OK Cancel

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**.



ssociation	Authentication	Connection	
Network na	me (SSID):	imacs	
Wireless r	network key		-
This netw	ork requires a ke	y for the following:	
Network	Authentication:	Open	¥
Data enc	ryption:	WEP	~
Network	key:		
Confirm n	etwork key.		
Key index	(advanced):	1 0	
The k	ev is provided fo	me a tomatically	

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



macs pro	perties		?
Association	Authentication	Connection	
Select this wireless Et/	option to provide hemet networks.	authenticated network a	occess for
Enable	IEEE 802.1x auth	nentication for this netwo	rk
EAP type:	SecureW2		¥
	Protected EAP	(PEAP)	
	Smart Card or o	ther Certificate	
Authent	icate as compute icate as guest wf able	r when computer inform	ation is available
		ОК	Cancel

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.

EAP type:	SecureW2	~

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.

Connection	Certificates	Authe	ntication	User account	
Select Au	thentication Me	thod:	PAP		*
	EAP Ty	per			~

Figure 11: Authentication Tab

### TTLS User Account Tab

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

Connection	Certificates	Authentication	User account	
		Promp	t user for credentials	
Username: Password:	Username:	testuser		
	••••			
	Domain:			
		Use this account	to logon computer	

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.