

# WIRELESS CONFIGURATION FOR PERSONAL LAPTOPS RUNNING Windows XP/2000

Prior to connecting to the NSU Wireless network you must have all Windows XP/2000 operating system Updates and Patches through the Microsoft Windows Update System. The Microsoft Windows Update System can be accessed by opening Internet Explorer and clicking on Tools->Windows Update



**WIRELESS ACCESS IS NOT GUARANTEED TO WORK IF THE SYSTEM IS NOT FULLY PATCHED!**

NSU recommends that you have Antivirus software installed to protect your PC and NSU's network from Virus infections.

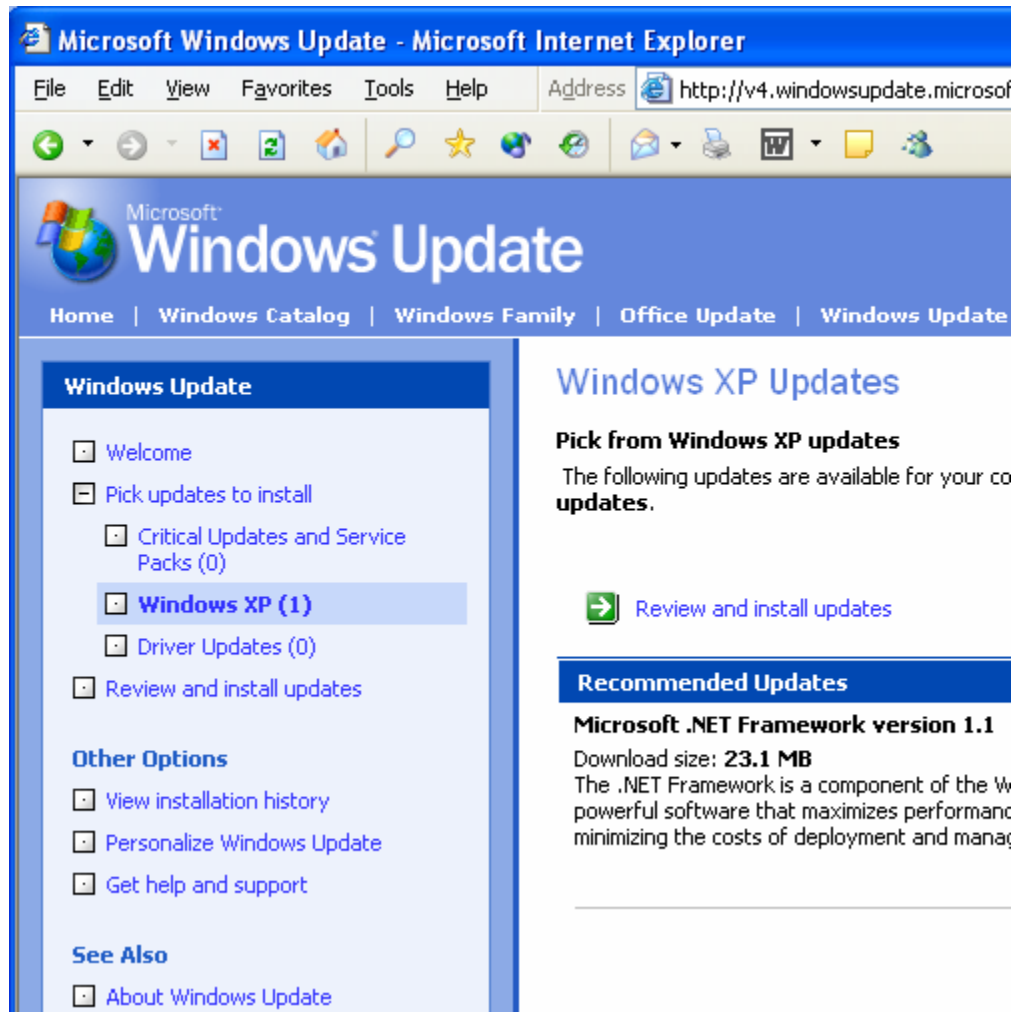
Free Antivirus software can be found here:

AVG <http://www.grisoft.com> (free for personal use [http://www.grisoft.com/us/us\\_dwnl\\_free.php](http://www.grisoft.com/us/us_dwnl_free.php))

AVAST <http://www.avast.com> (free for personal use [http://www.avast.com/i\\_idt\\_226.html](http://www.avast.com/i_idt_226.html))

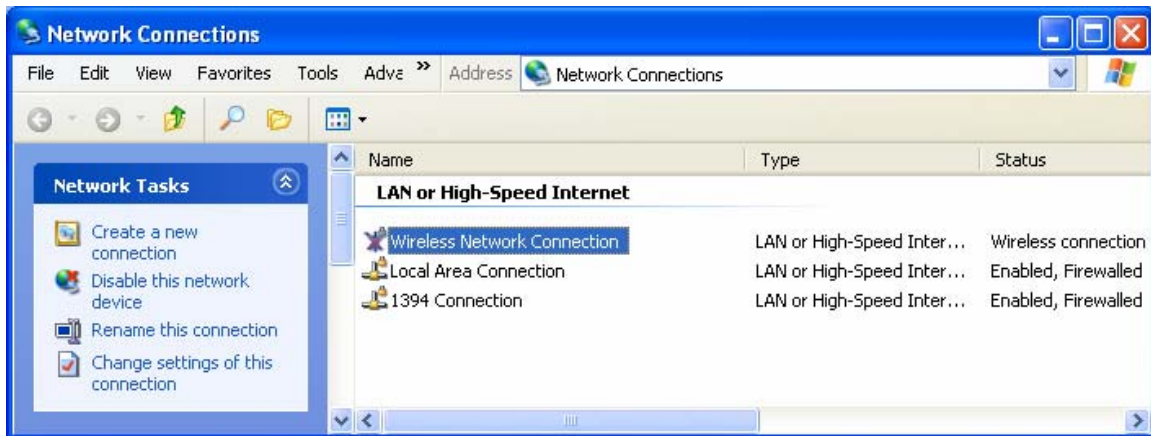
**Make sure you have the latest Microsoft Updates.**

- a. All the *Critical Updates and Services Packs* **MUST** be installed.
- b. Most **Windows XP** (or Windows 2000) patches should be installed especially if they pertain to WEP, WiFi, Encryption and Networking.
- c. All the *Driver Updates* should be installed especially if they pertain to your WiFi card.

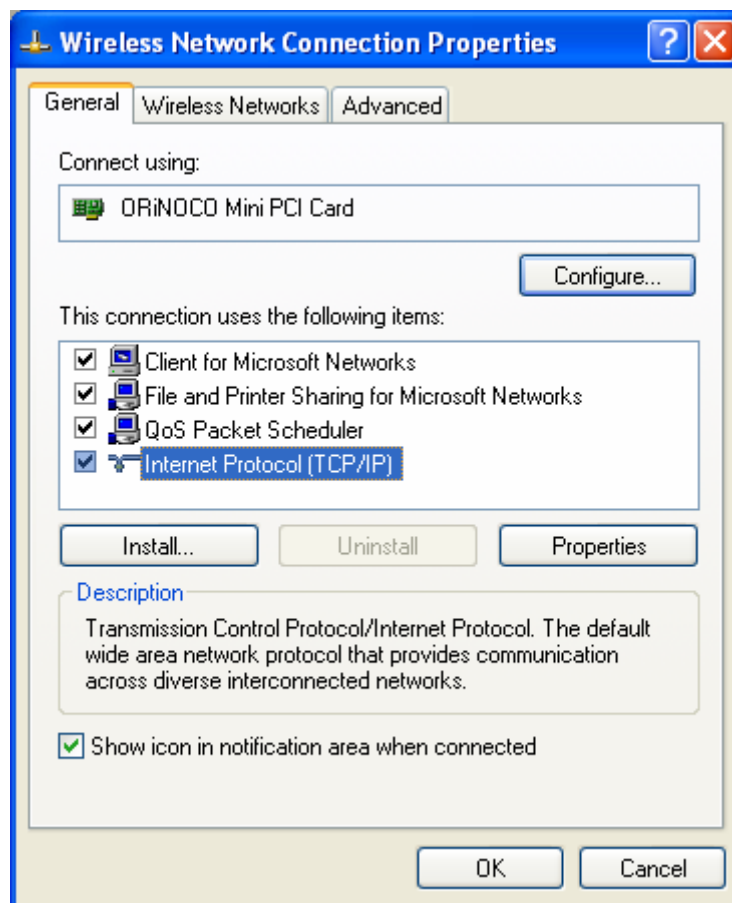


**Configure your computer for wireless access at NSU.**

- a. Right click on the *My Network Places* icon on your Desktop and select Properties. The *Network Connection* Panel will open. If you do not have a *My Network Places* icon on your desktop you can open the *Network Connection* Panel by clicking Start->Control Panel->Network Connections.

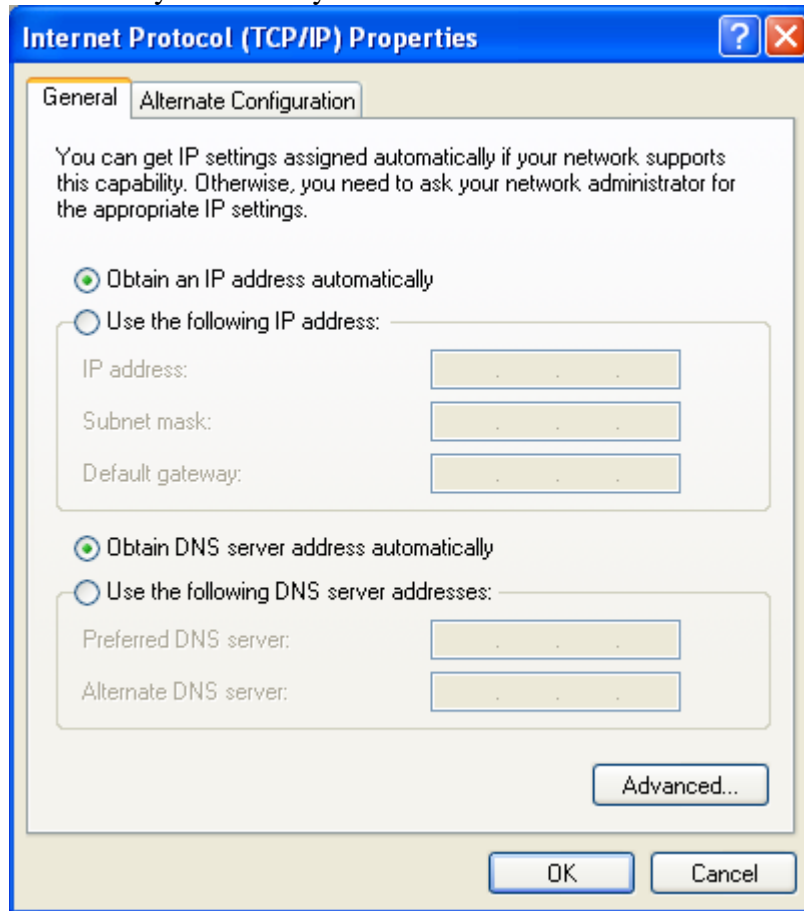


- b. Make sure your wireless card is *enabled* (if it is disabled it will say Disabled on the right side of the Wireless Network Connection) and then right click on *Wireless Network Connection* and choose properties.

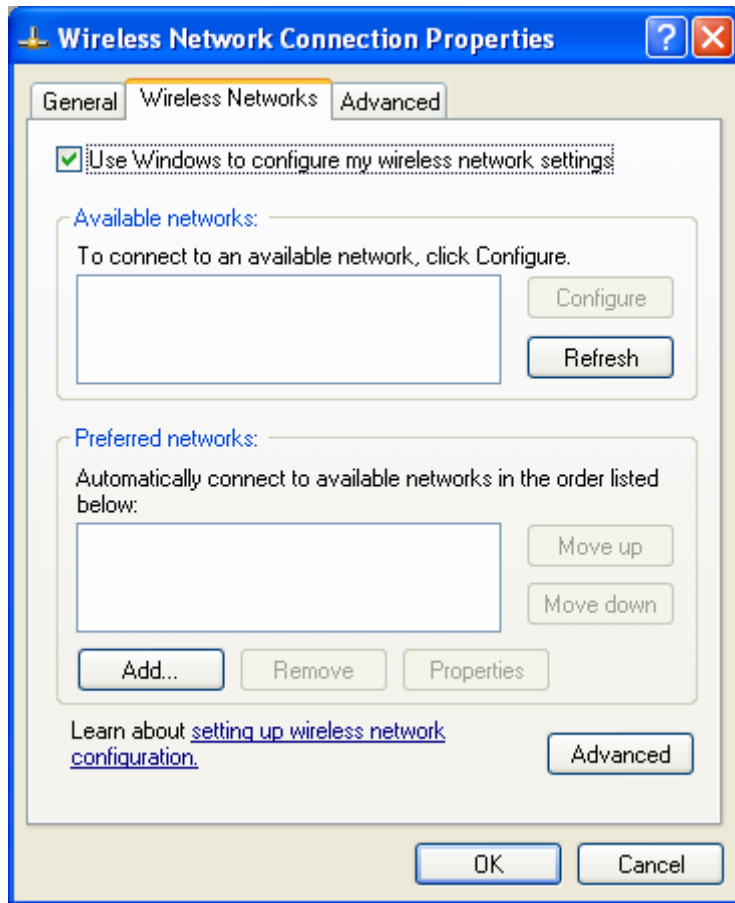


- c. Make sure the *Internet Protocol (TCP/IP)* properties are set properly. To do so click on *Internet Protocol (TCP/IP)* and then on the *Properties* button and make sure that your settings look like the following window.

- i. You **MUST** have the *Show icon in notification area when connected* **checked** or you will not be able to see the authentication message when you are ready to authenticate.



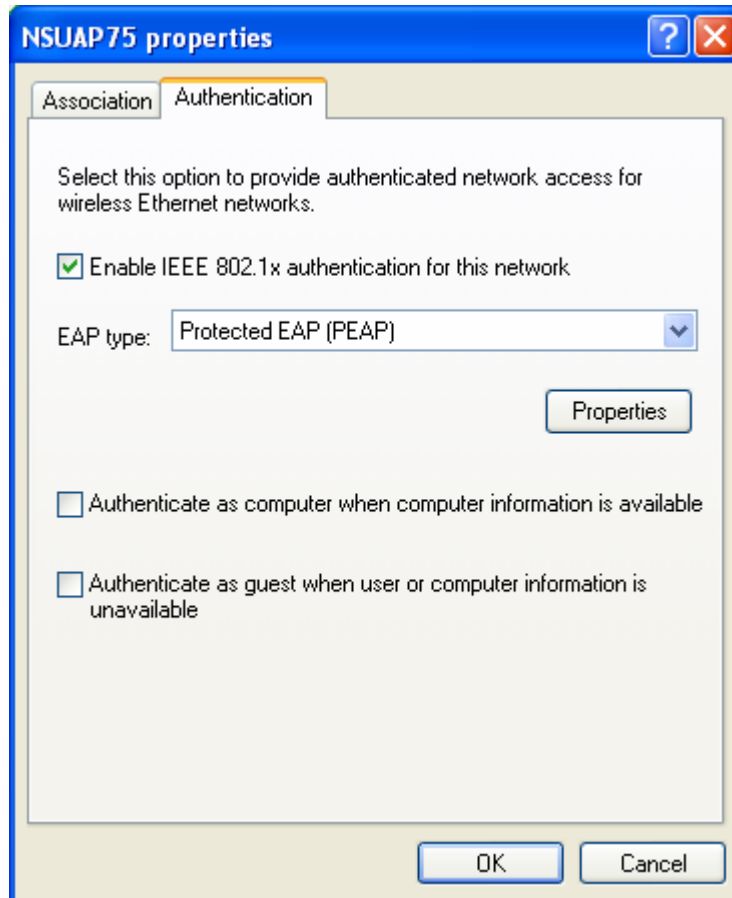
- d. If the above setting are correct and/or you have changed them to reflect the above screenshot, then click **OK** and click on the *Wireless Network* tab (see image 4 b.). You will see the following.



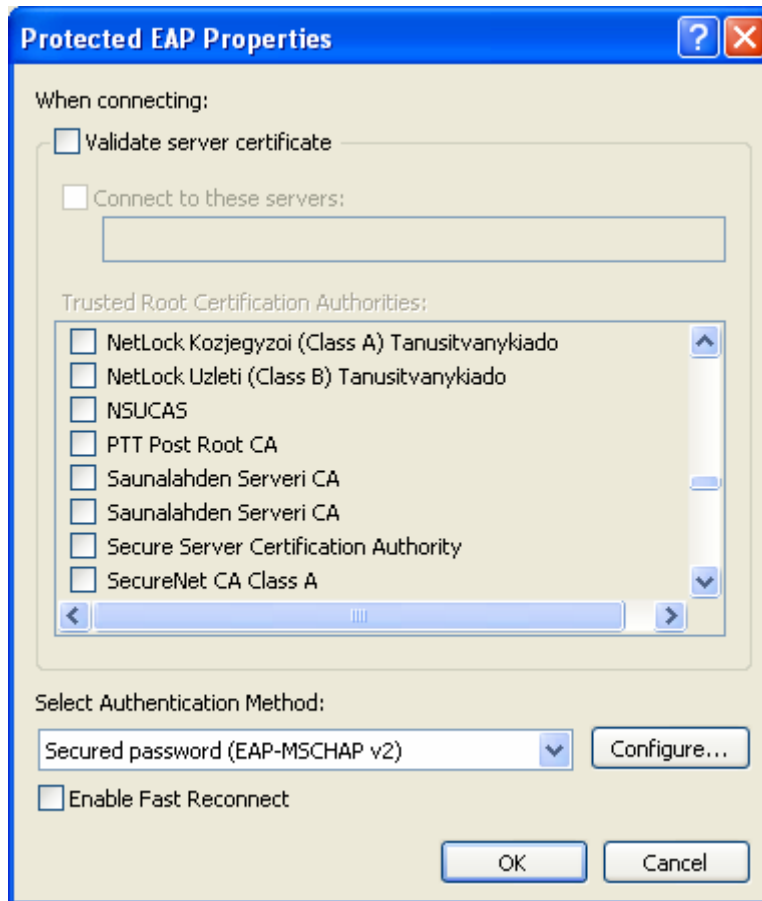
- e. Click the Add button and fill the appropriate fields as follows:
- i. SSID: **NSUWIFI**
  - ii. Network Authentication: **Open**
  - iii. Data Encryption: **WEP**
  - iv. Check **The Key is provided for me automatically**
  - v. Uncheck the last box.

The image shows a screenshot of the 'Wireless network properties' dialog box, specifically the 'Authentication' tab. The dialog box has a blue title bar with a question mark icon and a close button. The 'Authentication' tab is selected, and the 'Association' tab is also visible. The 'Network name (SSID)' field contains the text 'NSUWIFI'. Below this, there is a section titled 'Wireless network key' with a blue header. Inside this section, it says 'This network requires a key for the following:'. There are two dropdown menus: 'Network Authentication' set to 'Open' and 'Data encryption' set to 'WEP'. Below these are two empty text boxes for 'Network key' and 'Confirm network key'. There is also a 'Key index (advanced)' spinner box set to '1'. At the bottom of the 'Wireless network key' section, there is a checked checkbox labeled 'The key is provided for me automatically'. Below this section, there is an unchecked checkbox labeled 'This is a computer-to-computer (ad hoc) network; wireless access points are not used'. At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons.

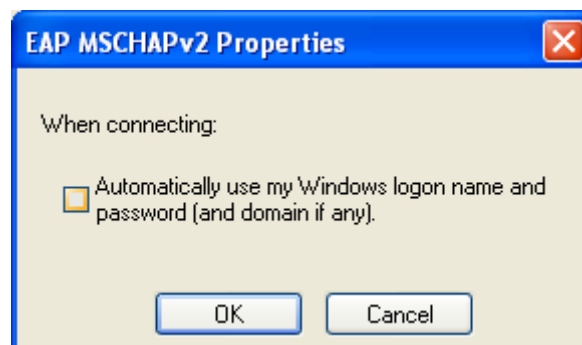
- f. Click on the Authentication tab and make sure it looks like the following.
  - i. Enable IEEE 802.1x authentication
  - ii. Set EAP type to PEAP.
  - iii. Uncheck both boxes under EAP type



- g. Click on the **Properties** button and make sure you have the same settings as below.
  - i. Uncheck the **Validate server certificate** button
  - ii. Make sure **Authentication Method** is set to **Secured password EAP-MSCHAP v2**



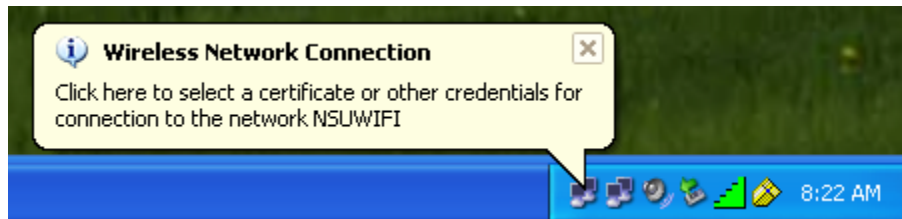
- h. Click the **Configure...** button next to **Secured password** and make sure you **uncheck** the option to **Automatically use my Windows logon name and password**. (If your laptop is a part of the NSU\_LAN domain, i.e. you are using a NSU provided laptop and you log-in to your laptop using a NSU account than you can check this option and skip step 4 below. Personal laptops are not part of the NSU\_LAN domain)



At this point you can click **OK** in order to close every open window.

## Authenticating with the Wireless Network

If you have followed all the steps correctly you should see the following message in the bottom right corner of your desktop (See *Configure your computer for wireless access at NSU. Section C* if you do not see any notification). This message might take up to a minute to appear depending on your wireless connection settings i.e. multiple access points configured.



When you see this message click on it (do not click on the **X** to kill it). *Fill the following window with the appropriate information.* (The User name information below is for demo purposes only)



Enter Credentials

User name:

Password:

Logon domain:

OK Cancel

If everything goes well you will see that the authentication succeeded and that the adapter has a valid IP address.

Network Connections

File Edit View Favorites Tools Adva >> Address Network Connections

Network Tasks

- Create a new connection
- Disable this network device
- Repair this connection
- Rename this connection
- View status of this connection
- Change settings of this connection

Other Places

- Control Panel
- Network
- My Documents
- wnsu104850

Details

**Wireless Network Connection**

Authentication succeeded, Firewallled

IP Address: 172.31.0.13  
Subnet Mask: 255.255.0.0  
Assigned by DHCP

Access Point  
Network: NSUSAP172  
Encryption: Enabled  
Signal Strength: Very Good

Name	Type	Status
<b>LAN or High-Speed Internet</b>		
Wireless Network Connection	LAN or High-Speed Inter...	Authentication succeeded
Local Area Connection	LAN or High-Speed Inter...	Enabled, Firewallled
1394 Connection	LAN or High-Speed Inter...	Enabled, Firewallled