

## Instructions for Configuring Secured Wireless Network Connections

These instructions show the basic steps to connect to one of the secured wireless networks. They were written using a Windows XP laptop as an example but the basic configuration items are similar on other devices and operating systems. Note that your goal is to configure WPA2-Enterprise with PEAP. Your device may or may not support this. If your device does not support this authentication method, your only choice is to use the bc-open network. Note that if you are only going to use the bc-open network, you do not need to follow these steps below. In fact, trying to enable WPA2 on the bc-open network will probably cause you to be unable to connect to that network.

There are currently two secure SSIDs or wireless network names available: bc-employee and bc-secure. BC-Employee is intended for use by employees of the college. This include all faculty, staff, etc. The bc-secure network is available to any college user that has an account. This includes students and sponsored guests.

These two networks use a wireless security system that provides complete encryption of the login process and all data between the wireless device and the wireless access point. This makes it much less likely that someone can listen to or “snoop” traffic on the wireless network.

A third network is available called bc-open. This network can be used by anyone with a college network (BCNET) account but it is NOT secure. This network is primarily to help provide instructions on how to connect to the secured networks and to support devices which do not have the ability to use the WPA2/PEAP authentication scheme required by the secured networks. BC-Open replaces the bc-airnet network on the old wireless system.

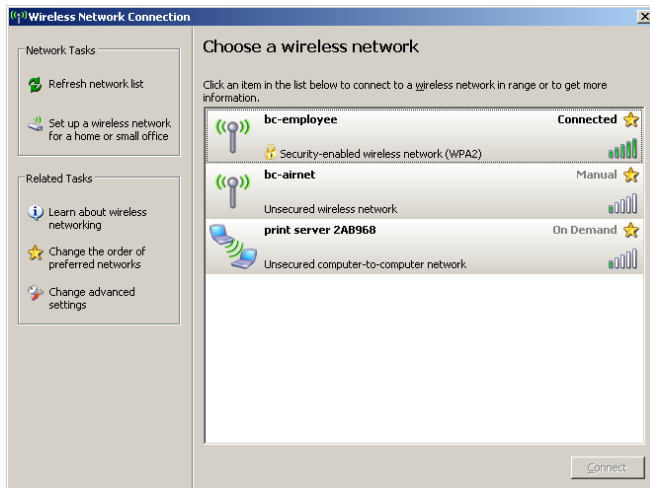


Figure 1

login is complete. The only way to make it secure is to use a VPN connection after you complete the login process.

In order to begin the configuration process, you need to use your computer’s wireless network configuration tool. In most cases, you can right click on the wireless network

Again, only the bc-secure and bc-employee networks are secured networks. The bc-open network transmits all traffic in the clear after

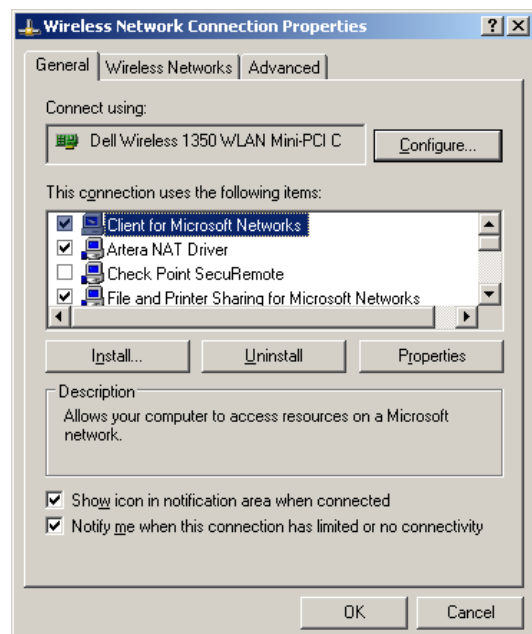
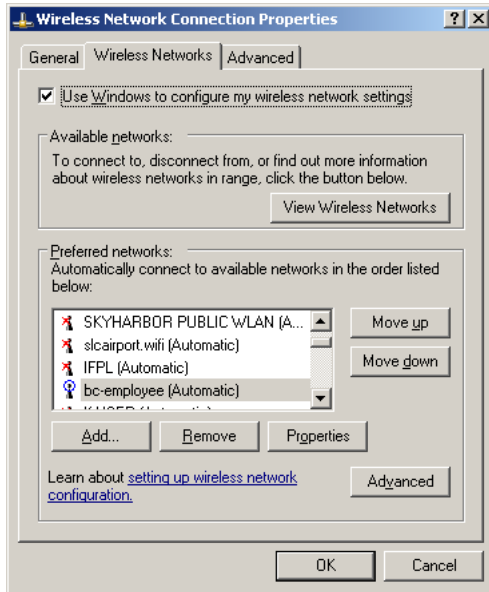


Figure 2

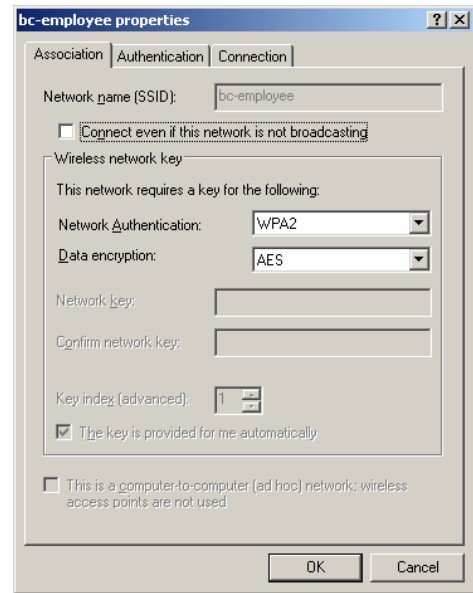
icon at the bottom of your screen (in the tray area) and you'll see a choice that says "View available wireless networks". Click on this item and you should see a window similar to Figure 1.

Click on "Change advanced settings" and you should see a window similar to Figure 2. Click on the "Wireless Networks" tab.

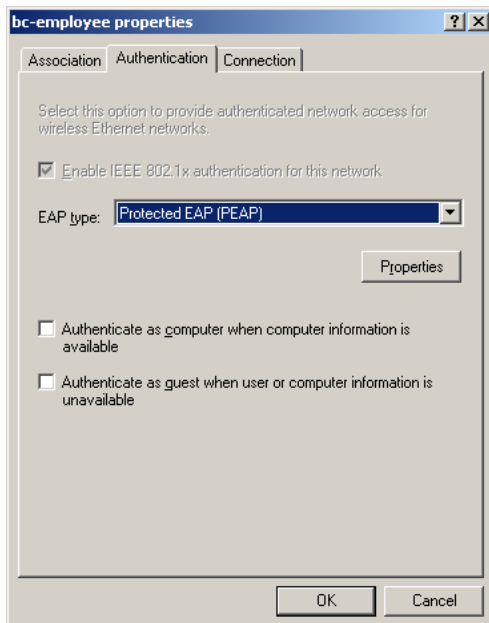


Select "bc-employee" or "bc-secure" from the list and click the Properties button.

Under "Network Authentication", select WPA2. Under "Data encryption", select AES. If you cannot select these items, then you won't be able to authenticate using the bc-employee or bc-secure SSID



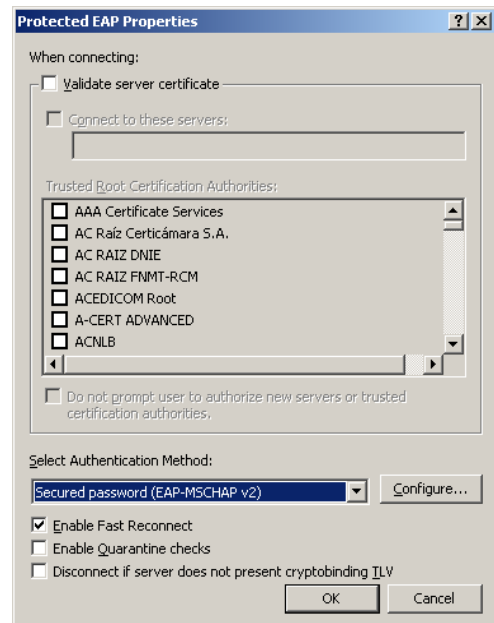
until you upgrade the drivers for your wireless adapter or use a device that supports this authentication method.



Select the "Authentication" tab.

Select "Protected EAP (PEAP)" as the EAP type. Click OK. Again, if you can't select PEAP as the EAP type, you won't be able to connect to bc-employee or bc-secure network until you upgrade your wireless adapter software. Leave the other two check boxes unchecked as shown.

Click on the Properties button. Uncheck the box for "Validate server certificate". We plan to implement this feature in the future but it is not



ready right now. Select "Secured password (EAP-MSCHAP v2)" under Select Authentication Method. Click the box for

“Enable Fast Reconnect”. Leave the other two boxes unchecked. Click the Configure button.

Make sure that the box for “Automatically use my Windows logon name and password” is unchecked. Click OK until you get back out to the beginning.

You should now be able to connect to this network. Go to “View Available Wireless Networks” as in step one above or right click on your wireless network icon in the system tray and select “View Available Wireless Networks”. Click on the network name that you just configured and click Connect. The logon process may take a few minutes to complete. Also, you may see a popup at the system tray asking you to click to complete the logon process. Click on this popup and you can enter your username and password. You do not need to enter the domain. You may not get this popup every time you connect to the network. If you have not restarted your laptop, you will probably not need to re-enter your credentials.

