#### **Quick Reference Guide**

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#### **Access Network Connections**

- 1. Begin by having your wireless network card inserted into the appropriate slot on your laptop (or desktop).
- 2. Open the Network Connections page, usually by going to **Start** -> **Settings** -> **Network Connections**

OR

Start -> All Programs -> Accessories -> Communications -> Network Connections

- 3. This should display the list of physical networking interfaces.
  - Select the desired wireless connection
  - Select the File menu Properties

#### OR

• Right-click on the wireless network card you want to use and select "Properties" from the shortcut menu. Not all wireless cards support the advanced security options being demonstrated here, and you may have a built-in card for your laptop which is too old to support all features, requiring the installation of a second wireless network card.



• This will bring up the following window:

👃 Wireless Network Connection 3 Prop 💿 🛛
General Wireless Networks Advanced
Connect using:
D-Link AirPlus G DWL-G630 Wireless <u>C</u> onfigure
This connection uses the following items:
Client for Microsoft Networks
QoS Packet Scheduler
Install Uninstall Properties
Description
Allows your computer to access resources on a Microsoft network.
<ul> <li>Show icon in notification area when connected</li> <li>Notify me when this connection has limited or no connectivity</li> </ul>
OK Cancel

Note: The kind of network card may vary. For this example, we used a D-Link brand model AirPlus G DWL-G630 wireless card as shown in the example above.

## **Modify Wireless Connection Properties**

- 4. Select the Wireless Networks tab.
- 5. Select the checkbox to allow "**Windows to configure my wireless network settings**". Some cards may come with their own software to configure these advanced settings, but since the features are also built-in to Microsoft Windows XP and above, we choose to show this example only. Use other software at your own risk

Wireless Network Co	onnection 3 Prop 🛛
General Wireless Networks	Vanced
Viedowa to coofiguro mu	
Use Windows to conlique my	Wileless network settings
- Available <u>n</u> etworks:	
about wireless networks in rang	ge, click the button below.
	View Wireless Networks
Preferred networks: Automatically connect to availa below:	ble networks in the order listed Move up Move down
Add <u>Remove</u> Leam about <u>setting up wireless</u> <u>configuration.</u>	Properties network Advanced
	OK Cancel

6. If you see "campus-domain" already configured in the Preferred networks section, please highlight it using your mouse, and click the **Remove** button, then the **OK** button. This will take you back to Step 3 of this document.

#### Add a New Wireless Connection

7. On the Wireless Connection tab, in the Preferred networks section, configure the wireless network connection by clicking the **Add...** button. The following window will display.

Wireless network properties	×
Association Authentication Connection	_
Network <u>n</u> ame (SSID):	
Wireless network key	
This network requires a key for the following:	
Network <u>A</u> uthentication: Open	
Data encryption: WEP	
Network key:	
C <u>o</u> nfirm network key:	
Key inde <u>x</u> (advanced): 1	
✓ The key is provided for me automatically	
This is a <u>c</u> omputer-to-computer (ad hoc) network; wireless access points are not used	
OK Cancel	

8. Select the Association tab, and type *campus-domain* as the Network Name (SSID).

9. Change the Network Authentication drop down box to **WPA** (**not** WPA-PSK). This will change the Data encryption drop down box to either TKIP or AES. Either is supported, but AES is recommended if it is available to you. AES is not available for the card in the example. The window looks like



## **Configure Authentication**

10. Select the Authentication tab.



11. Change the EAP type to Protected EAP (PEAP) and uncheck any of the checkboxes.

Wireless network properties	? 🔀
Association Authentication Connection	
Select this option to provide authenticated network access for wireless Ethernet networks.	
✓ Enable IEEE 802.1x authentication for this network	
EAP type: Protected EAP (PEAP)	~
Properties	•
Authenticate as computer when computer information is avai	able
Authenticate as guest when user or computer information is unavailable	

12. Below the EAP type drop-down box, select the **Properties** button to view the Protected EAP Properties window.

Protected EAP Properties	? 🔀
When connecting:	
Trusted Root Certification Authorities:	
ABA.ECOM Root CA Autoridad Certificadora de la Asociacion Nacional del Notaria Autoridad Certificadora del Colegio Nacional de Correduria P Baltimore EZ by DST Belgacom E-Trust Primary CA C&W HKT SecureNet CA Class A	
Do not prompt user to authorize new servers or trusted certification authorities.	
Select Authentication Method:	
Secured password (EAP-MSCHAP v2)	2
Enable Fast Reconnect	2

13. Uncheck the checkbox for Validate server certificate.

Protected EAP Properties	? 🔀
When connecting:	
Validate server certificate	
Connect to these servers:	
Trusted <u>R</u> oot Certification Authorities;	
ABA.ECOM Root CA	<u>^</u>
Autoridad Certificadora de la Asociacion Nacional del Notaria	
Autoridad Certificadora del Colegio Nacional de Correduria P	
Belgacom E-Truet Primary CA	
C&W HKT SecureNet CA Class A	
	≤
Do not prompt user to authorize new servers or trusted certification authorities.	
Select Authentication Method:	
Secured password (EAP-MSCHAP v2)	e
Enable Fast Reconnect	
OK Canc	el

14. Click the **Configure...** button to bring up the following window:



15. Uncheck the Automatically use my Windows logon name and password (and domain if any), and click OK. Microsoft Windows will remember the username and password credentials you use the first time, and in the current version of Microsoft's software, it takes a very long time to recognize that an attempt has failed if you change your domain password in the future. Network Services recommends that you re-do this procedure, specifically step #6, if you change your domain password, rather than relying on Microsoft Windows to automatically update it by leaving this box checked.

- 16. Click **OK** on the Protected EAP Properties window.
- 17. Click **OK** on the Wireless Network Properties window.
- 18. Click **OK** on the Wireless Network Connection window.

This will cause a "balloon" to pop up on your windows system tray that looks like:



# Logging on with Credentials

19. Click somewhere in this balloon to open the following window:

Enter Credentials
User name:
Password:
Logon domain:
OK Cancel

20. Enter your email address as the *User name* (e.g. jdoe@csulb.edu). Enter the password you use to login to your computer into the *Password* field (this is NOT your email password, unless you have purposely made them the same). **Do not enter any information into the** *Logon domain* box.

#### 21. Click **OK** when finished.

If you are within range of this SSID, you computer will automatically connect you.