Southwest Network Wireless Setup Guide for Windows 2000, XP

This setup will prepare your computer to connect to the Southwest Network. When this setup is completed you must then complete the Bradford Networks registration process.

Before You Begin

USE OF THE RESNET NETWORK CONSTITUTES AGREEMENT WITH THE <u>SOUTHWEST</u> <u>NETWORKS RESPONSIBLE USE POLICY</u>.

This guide covers wireless setup for Windows XP's built-in wireless configuration. Many wireless adapters supply their own wireless software that this guide does not cover. If you need assistance with other software please contact Technology Services. Additional documentation will be released shortly that will cover other popular software packages.

System Requirements:

- Microsoft Windows 2000 with Service Pack 4 or Windows XP with Service Pack 2
- A Wireless 802.11g adapter that supports WPA encryption (802.11b adapters will not work)

Setting up 802.1x authentication in Windows XP for the RESNET wireless network is a straightforward process. Windows XP includes a built-in 802.1x client that is accessible from the Network Properties dialogs. Before you begin, make sure you visit Windows Updates (accessible from the tools menu in Internet Explorer) and install all security updates and service packs.

If you need assistance with any part of this guide, please contact Technology Services. You may reach us by phone at 575-392-6565 x1036, submit an <u>Online Support Request</u>, or stop by MTL Suite 116.

Step by Step Instructions

 The first step in setting up your wireless card for 802.1x is to open your Network Connections window. You can find this by going to the Start menu and selecting the "Connect To" item, then selecting "Show all Connections" from the submenu. Once you have selected "Show all Connections", you should see a dialog similar to the one below.



2. Right-click on your wireless adapter and click **properties**. A Wireless Network Connection Properties dialog will appear.

Wireless Network Connection Properties	? ×
General Advanced	
Connect using:	
Wireless-G Notebook Adapter WPC5	onfigure
This connection uses the following items:	
Client for Microsoft Networks	<u> </u>
Odyssey Network Agent	
Image: Set	(S
Install Uninstall P	roperties
Description	
Allows your computer to access resources on a Mic network.	rosoft
Show icon in notification area when connected	
☑ Notify me when this connection has limited or no c	onnectivity
ОК	Cancel

University of the Southwest Technology Services • MTL Suite 116 575.392.6565 ext. 1036 Revised 8/6/2008 Make sure "Show icon in notification area when connected" is **checked**. From time to time, your computer will need to communicate to you about wireless status. It can only do so if this box is checked.

3. Next, click on the Wireless Networks tab. If you do not have a "Wireless Networks" tab in your properties box, it is possible that you need to start the Wireless Zero Configuration Service. For details on how to start this service, skip to page 8.

ect from, of find out more information s in range, click the button below. View Wireless Networks
Move <u>up</u> Move <u>d</u> own
Move <u>d</u> own
move Properties

In this window make sure that "Use Windows to configure my wireless networks settings" is **checked**. This allows Windows to control your wireless card.

Click the "Add..." button below Preferred networks to continue.

reless network properties	?
Association Authentication Connection	
Network name (SSID): Student	
Wireless network key	
This network requires a key for the following	g:
Network Authentication:	•
Data encryption:	•
Network <u>k</u> ey:	
Confirm network key:	
Key inde <u>x</u> (advanced):	
$\mathbf{ abla}$ The key is provided for me automatical	y.
This is a <u>c</u> omputer-to-computer (ad hoc) r access points are not used	network; wireless
	DK Cancel

4. In the "Network name (SSID)" field, type **RESNET** in **all capital letters**. In the drop-down box labeled "Network Authentication" select **WPA**. Directly below there is another box labeled "Data Encryption"; select **AES**. Make sure the box at the bottom of the dialog labeled "This is a computer-to-computer (ad hoc) network; Wireless access points are not used" is **NOT checked**. Click the "Authentication" tab to continue.

ireless net/	work properties	<u>? ×</u>
Association	Authentication Connection	1
Select this wireless Etl	option to provide authenticated network a nemet networks.	ccess for
🔽 Enable	IEEE 802.1x authentication for this netwo	rk
EAP type:	Protected EAP (PEAP)	•
	6	Properties
Authen	ticate as <u>c</u> omputer when computer informa le	ition is
Authen unavail	ticate as guest when user or computer info able	ormation is
		Cancel

5. On the drop-down menu labeled "EAP type", select "Protected EAP (PEAP)". Make sure both check boxes below are **not checked**. Click the "Properties" button below the drop box to continue.

rotected EAP Properties	<u>?</u> ×
When connecting:	
_ ☑ Validate server certificate	1
Connect to these servers:	
joseph.usw.edu	
Trusted <u>R</u> oot Certification Authorities:	
ABA.ECOM Root CA	
Autoridad Certificadora de la Asociacion Nacior	nal del Notaria 💻 📗
🛛 🗖 Autoridad Certificadora del Colegio Nacional de	e Correduria P.
Baltimore EZ by DST	
Belgacom E-Trust Primary CA	
C&W HKT SecureNet CA Class A	
C&W HKT SecureNet CA Class B	T
Do not grompt user to authorize new servers or certification authorities. Select Authentication Method:	trusted
Secured password (EAP-MSCHAP v2)	Configure
- Enable Fast Reconnect	
OK	Cancel

6. This window allows you to make your connection as secure as possible. Check both "Validate Server Certificate" and "Connect to these servers". In the servers box, type joseph.usw.edu. It is not necessary to select any of the Trusted Root Certificate Authorities. This will be done automatically in a later step. Be sure that "Do not prompt user to authorize new servers or trusted certification authorities" is not checked. Next, on the pull-down box labeled "Select Authentication Method" select "Secured Password (EAP-MSCHAP v2)". Uncheck "Enable Fast Reconnect". Click the Configure button to continue.

EAP MS	CHAPv2	Propertie	5		×
When	connectin	g:			
гű	<u>\</u> utomatica	ally use my ^s	Windows Io	gon name	and
i j) bassword	and domair	n if any).]
	1				
		OK	Can	cel	

 Make sure that "Automatically use my Windows logon name and password (and domain if any)" is **NOT Checked**. Click "**OK**". This window will allow you to use your CSW Mustang Mail username and password.

University of the Southwest Technology Services • MTL Suite 116 575.392.6565 ext. 1036 Revised 8/6/2008 Finally, click on "OK" in each of the open windows until you come back to your "Network Connections" window. Windows will then attempt to connect to the wireless network. When Windows XP attempts to connect for the first time, you should see a balloon pop up in your taskbar area like the one shown below:



9. When this balloon appears, simply click on the balloon and you will be presented a box like the one below:

Liser name:	
User name:	
Password:	
Logon domain: USW	

In this box type your Mustang Mailusername (**firstname.lastname**) and your password (Mustang####, where # is your SSN). The Login domain is **USW**. Click "**OK**".

10. Shortly after you click OK, another balloon will pop up in your taskbar like the one below:



Click on the balloon and you will be presented a dialog like the one below:

University of the Southwest Technology Services • MTL Suite 116 575.392.6565 ext. 1036 Revised 8/6/2008

ertificate		
tion Authority for th Trust Network ct certificate, click O n. Click CANCEL to (e server's ce K to connect drop connect	ertificate is:
	Cancel	View Server Certificate
	ertificate tion Authority for th Trust Network ct certificate, click O n. Click CANCEL to o	ertificate tion Authority for the server's ce Trust Network ct certificate, click OK to connect n. Click CANCEL to drop connect

Click "**OK**" to accept the server security certificate.

You have now completed Step 2 in the connection process and are now ready to complete the Bradford Registration process.

Follow the on screen prompts which will do the following:

- 1. Add your name and the MAC address of your computer to the Bradford Network Registration tables.
- 2. Download the scanning agent which will verify installation and updates for:
 - > Operating System Security Updates
 - Anti-Virus Software
 - > Anti-Spyware Software

Enabling the Wireless Zero Configuration Service

1. First, cancel out of any wireless dialogs you may have open. Next, click on your Start menu and select **Control Panel**. Then from your control panel, double-click on **Administrative Tools**. Then double-click **Services**. You will see a dialog similar to the one below:

Eile <u>A</u> ction <u>V</u> iew ← → I II 😭 🕃 Services (Local)	Help I I I I I I I I I I I I I I I I I I I	Name 4				
← → I III 🖆 🕻	Image: Services (Local) Wireless Zero Configuration	Name 4				
Services (Local)	Services (Local) Wireless Zero Configuration	Name A				
	Wireless Zero Configuration	Name A				
	in cless cere comgaration		Description	Status	Startup Type	Log On As
		System Restore Service	Performs s	Started	Automatic	Local System
	Stop the service	Task Scheduler	Enables a	Started	Automatic	Local System
	Restart the service	TCP/IP NetBIOS Helper	Enables su	Started	Automatic	Local Service
			Provides T	19972912121	Manual	Local System
	Description:	Telnet	Enables a r		Disabled	Local System
	Provides automatic configuration for the	Terminal Services	Allows mult	Started	Manual	Local System
	802.11 adapters	Themes	Provides u	Started	Automatic	Local System
		Uninterruptible Power Supply	Manages a		Manual	Local Service
		Universal Plug and Play Devi	Provides s		Manual	Local Service
		Volume Shadow Copy	Manages a		Manual	Local System
		WebClient	Enables Wi	Started	Automatic	Local Service
		Windows Audio	Manages a	Started	Automatic	Local System
		Windows Firewall/Internet C	Provides n	Started	Automatic	Local System
		Windows Image Acquisition (Provides im	Started	Manual	Local System
		Windows Installer	Adds, modi		Manual	Local System
		Windows Management Instr	Provides a	Started	Automatic	Local System
		Windows Management Instr	Provides s		Manual	Local System
		Windows Time	Maintains d	Started	Automatic	Local System
		🦓 Windows User Mode Driver	Enables Wi	Started	Automatic	Local Service
		Wireless Zero Configuration	Provides a	Started	Automatic	Local System
		WMI Performance Adapter	Provides p		Manual	Local System
		🐝 Workstation	Creates an	Started	Automatic	Local System 🧲
	Extended Standard					

2. Scroll down to the very bottom of the list and you will find a service labeled "Wireless Zero Configuration". Double-click on this service to continue.

Vireless Zero Cor	figuration Proper	ties (Loc	al Computer)	<u>? ×</u>
General Log On	Recovery Deper	ndencies		
Service name:	WZCSVC			
Display <u>n</u> ame:	Wireless Zero Cor	nfiguration		
<u>D</u> escription:	Provides automati adapters	c configura	ation for the 802.1	1 🔺
Path to executat	le:			
C:\WINDOWS\	iystem32\svchost.ex	ke -k netsv	/CS	
Startup typ <u>e</u> :	Automatic			•
Service status:	Stopped			
<u>S</u> tart	Stop	Eau	use <u>R</u> e	esume
You can specify from here. Start para <u>m</u> eters:	he start parameters	that apply	when you start th	e service
<u>.</u>	0	IK	Cancel	Apply

- 3. Change the drop-down menu labeled "Startup Type" to **Automatic**. Once you have done this, click the "**Start**" button to immediately start the service. Click "**OK**" to save your settings.
- 4. Close your services window and start the wireless configuration directions from the beginning.