Windows 7 Configuration for ORU Wireless Networks



Figure 1

Windows 7 Documentation for the ORU-Employee wireless network

Clicking the Wireless Signal Strength Indicator icon should display the Wireless Network Connection window (figure 2). You may need to click the drop arrow to display the list. This is a list of wireless networks the device can "see". If the network you wish to connect to is not listed it may be down or you may be out of range. Due to the nature of a wireless network, signal strength can vary significantly over localized areas. If you are unable to see the network you should move to another area, preferably a known good "hotspot" and attempt to connect again. If the network name is still not listed you should attempt to determine if the network is up by checking if people near you are connected or by calling your help desk.



Here you can see the system has connected to the ORU-Employee network. If your device is connected to the appropriate network the device is properly configured.

If the device is not connected to a network, or is connected to the wrong network, double click the network name you wish to connect to. The device should attempt to connect. You may be presented with a login window. Attempt to login using your Novell user name and password. It may take a couple of minutes to connect. If the device connects it may display a window requesting you to select a location for the network you connected to. Select Public Network.

If the device doesn't connect, recheck the network and user name & password (if requested), then try the connection again. If the device is still unable to connect, then follow these steps to configure the device.

Add Network Profile

Start Control Panel. Set it to Category view if it isn't already (Figure 3).

	✓ 4 Search Control Panel
djust your computer's settings	View by: Category 🔻
System and Security Review your computer's status Back up your computer Find and fix problems Network and Internet Connect to the Internet View network status and tasks Choose homegroup and sharing options View devices and printers Add a device Connect to a projector Adjust commonly used mobility settings Programs	SetUser Accounts and Family SafetyAdd or remove user accountsSet up parental controls for any userSet up parental controls for any userAppearance and PersonalizationChange the themeChange desktop backgroundAdjust screen resolutionClock, Language, and RegionChange display languageCompose the subscriptionEase of AccessLet Windows suggest settingsOptimize visual display

Click "View network status and tasks". A window similar to (Figure 4) will open.

😋 🗢 🖳 🕨 Control Panel 🕨	Network and Internet Network and Sharing Center	ρ
Control Panel Home	View your basic network information and set up connections	2
Manage wireless networks Change adapter settings Change advanced sharing	See full map ORUORAL-8/651TT Internet (This computer)	
settings	View your active networks — Connect to a network You are currently not connected to any networks.	
	Change your networking settings Image: Set up a new connection or network Set up a wireless, broadband, dial-up, ad hoc, or VPN connection; or set up a router or access point. Image: Connect to a network Connect or reconnect to a wireless, wired, dial-up, or VPN network connection. Image: Choose homegroup and sharing options Access files and printers located on other network computers, or change sharing settings. Image: Troubleshoot problems Diagnose and repair network problems, or get troubleshooting information.	
See also HomeGroup Internet Options		
Windows Firewall		

Click "Manage wireless networks". The Manage wireless networks window will open (Figure 5).

If the desired network is listed, right click it and click Properties on the pop-up menu. Skip to the <u>Configure Properties</u> section.

	► Control Panel ► Network and	Internet 🔸 Manage Wireless Networks	Search Manage Wireless Networks	×
Manage Windows t	wireless networks that use	e (Wireless Network Connection) n the order listed below.		
Add Adapt	er properties Profile types Ne	twork and Sharing Center		0
° 1	items			

Click Add if the desired network is not listed. A window similar to (Figure 6) will open.



Click "Manually create a network profile". A window similar to (Figure 7) will open.

🚱 💷 Manually connect to a w	vireless network
Enter information for	the wireless network you want to add
Network name:	ORU-Employee
Security type:	WPA2-Enterprise 👻
Encryption type:	AES
Security Key:	Hide characters
Start this connection	automatically
Connect even if the r	network is not broadcasting
Warning: If you selec	ct this option, your computer's privacy might be at risk.
	Next Cancel

- Enter the Network name or SSID. This value is case sensitive
- Select the Security type from the drop down box. The choices may vary from device to device. Select a choice from this list which is in order of preference:
 - 1. WPA2-Enterprise
 - 2. WPA2
 - 3. WPA-Enterprise
 - 4. WPA
- Select AES for Data Encryption.
- Uncheck the "Connect even if the network is not broadcasting" box if it is checked.

Click Next.

	A Manually connect to a wireless network	
(Successfully added ORU-Employee	
	Change connection settings Open the connection properties so that I can change the settings.	
l		Close

Click "Change connection settings".

Configure Properties

The Wireless Network Properties window should be open (Figure 9).

ORU-Employee Wireles	s Network Properties
Connection Security	
Name:	ORU-Employee
SSID:	ORU-Employee
Network type:	Access point
Network availability:	All users
Connect automat	ically when this network is in range
Connect to a mor	e preferred network if available
Connect even if t	he network is not broadcasting its name (SSID)
	OK Cancel

Click the "Security" tab.

ORU-Employees Wireles	ss Network Properties	
Connection Security		
Security type: Encryption type:	WPA2-Enterprise AES	
Choose a network au Microsoft: Protected	thentication method: EAP (PEAP)	
time I'm logged on		
Advanced settings		
	OK Cancel	

- Select the Security type from the drop down box. The choices may vary from device to device. Select a choice from this list which is in order of preference:
 - 1. WPA2-Enterprise
 - 2. WPA2
 - 3. WPA-Enterprise
 - 4. WPA
- Select AES for Data Encryption.

Open the Protected EAP Properties window (Figure 11) by clicking the Settings button.

Protected EAP Properties
When connecting:
Validate server certificate
Connect to these servers:
Trusted Root Certification Authorities:
AddTrust External CA Root
Class 3 Public Primary Certification Authority
Equifax Secure Certificate Authority
GlobalSign Root CA
GTE CyberTrust Global Root
IXSrV201.oru.edu
Do not prompt user to authorize new servers or trusted certification authorities.
Select Authentication Method:
Secured password (EAP-MSCHAP V2) Configure
Enable Fast Reconnect
Enforce Network Access Protection
Disconnect if server does not present cryptobinding TLV
Enable Identity Privacy
OK Cancel

- Uncheck the "Validate server certificate" checkbox if it is checked.
- Select "Secured password (EAP-MSCHAP v2) from the Select Authentication Method drop down.

Click the Configure button to open the EAP MSCHAPv2 Properties window (Figure 12).



• If your user name and password on the device is the same as your Novell user name and password, you may check the "Automatically use my Windows logon name and password (and domain if any)." checkbox. This setting will enable you to log into the network without entering your user name and password a second time. Otherwise, uncheck the checkbox.

Click the OK button.

Click the OK button on the Protected PEAP Properties window.

Click the Advanced Settings button on the Wireless Network Properties window. The "Advanced settings" window will open (Figure 13). Select the 802.1x tab.

Advanced settings
802.1X settings 802.11 settings
Specify authentication mode:
User authentication Save credentials
Delete credentials for all users
Enable single sign on for this network
Perform immediately before user logon
Perform immediately after user logon
Maximum delay (seconds):
Allow additional dialogs to be displayed during single sign on
This network uses separate virtual LANs for machine and user authentication
OK Cancel

- Check the Specify authentication mode checkbox.
- Select User authentication from the drop down list.

Click the OK button.

Click the OK button on the Wireless Network Properties window.

At this point the device should be configured to connect to an ORU wireless network. You should be able to connect as described earlier. Step back thru the settings if you are not able to connect, paying close attention to the network name of SSID. It is case sensitive.