

## 2.6 Enable IEEE802.1X on switch.

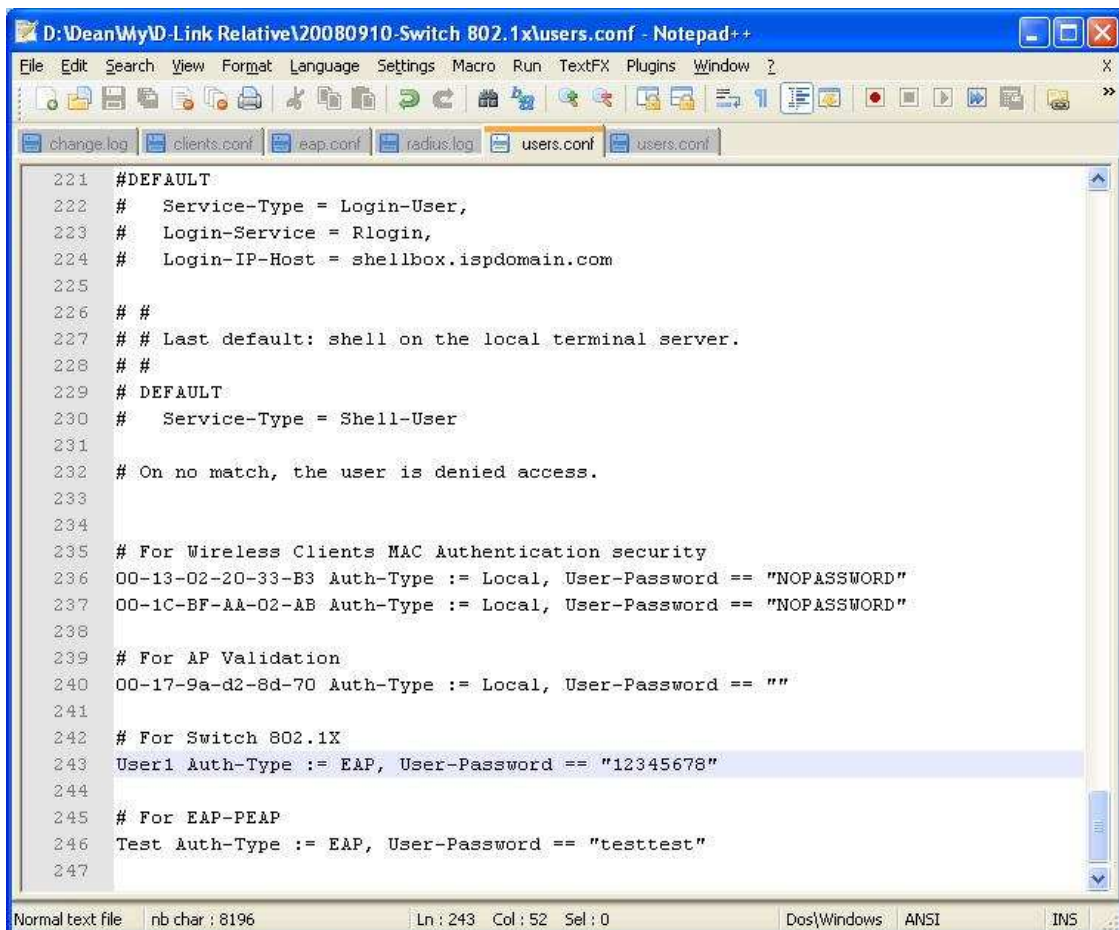
### 2.6.1. Setup your FreeRADIUS server

- Setup the IP address of your RADIUS server to 10.90.90.100/8
- Add a client entry to the FreeRADIUS server, **client.conf** file for the 10.0.0.0/8 network:

```
client 10.0.0.0/8 {  
    secret          = 12345678  
    shortname      = Radius_Authentication  
}
```

- Add a user to the the users.conf file as following

```
User1 Auth-Type := EAP, User-Password == "123456789"
```

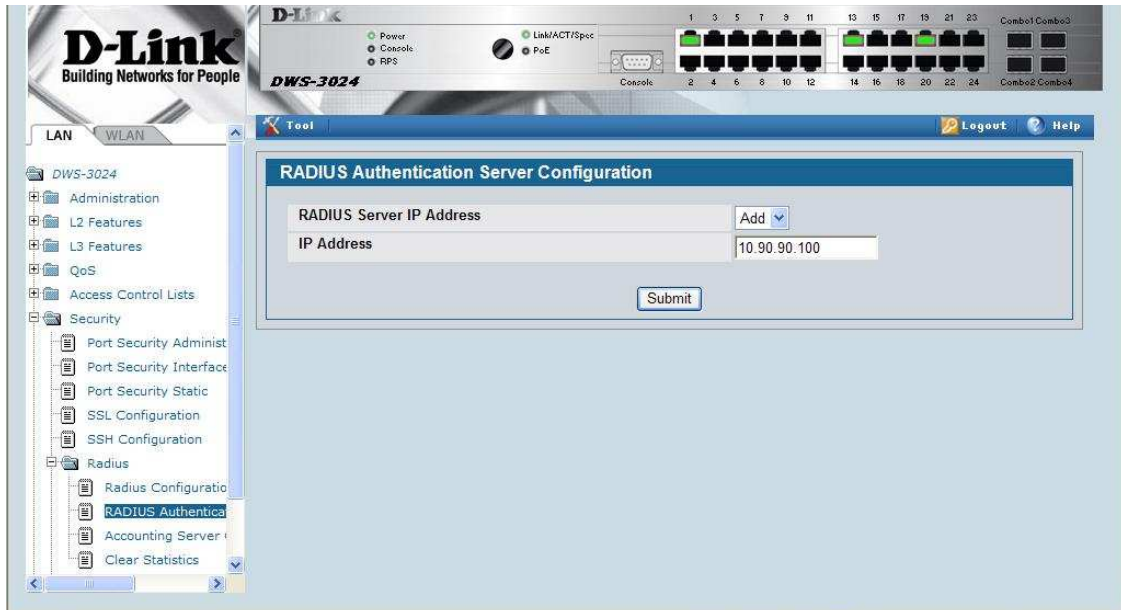


```
D:\DeanWmyD_Link Relative\20080910-Switch 802.1x\users.conf - Notepad++  
File Edit Search View Format Language Settings Macro Run TextFX Plugins Window ?  
change.log clients.conf eap.conf radius.log users.conf users.conf  
221 #DEFAULT  
222 # Service-Type = Login-User,  
223 # Login-Service = Rlogin,  
224 # Login-IP-Host = shellbox.ispdomain.com  
225  
226 # #  
227 # # Last default: shell on the local terminal server.  
228 # #  
229 # DEFAULT  
230 # Service-Type = Shell-User  
231  
232 # On no match, the user is denied access.  
233  
234  
235 # For Wireless Clients MAC Authentication security  
236 00-13-02-20-33-B3 Auth-Type := Local, User-Password == "NOPASSWORD"  
237 00-1C-BF-AA-02-AB Auth-Type := Local, User-Password == "NOPASSWORD"  
238  
239 # For AP Validation  
240 00-17-9a-d2-8d-70 Auth-Type := Local, User-Password == ""  
241  
242 # For Switch 802.1X  
243 User1 Auth-Type := EAP, User-Password == "12345678"  
244  
245 # For EAP-PEAP  
246 Test Auth-Type := EAP, User-Password == "testtest"  
247  
Normal text file nb char : 8196 Ln : 243 Col : 52 Sel : 0 Dos\Windows ANSI INS
```

- Save and restart your RADIUS server

## 2.6.2. Add the IP address of the RADIUS server on Switch, and give it correct settings

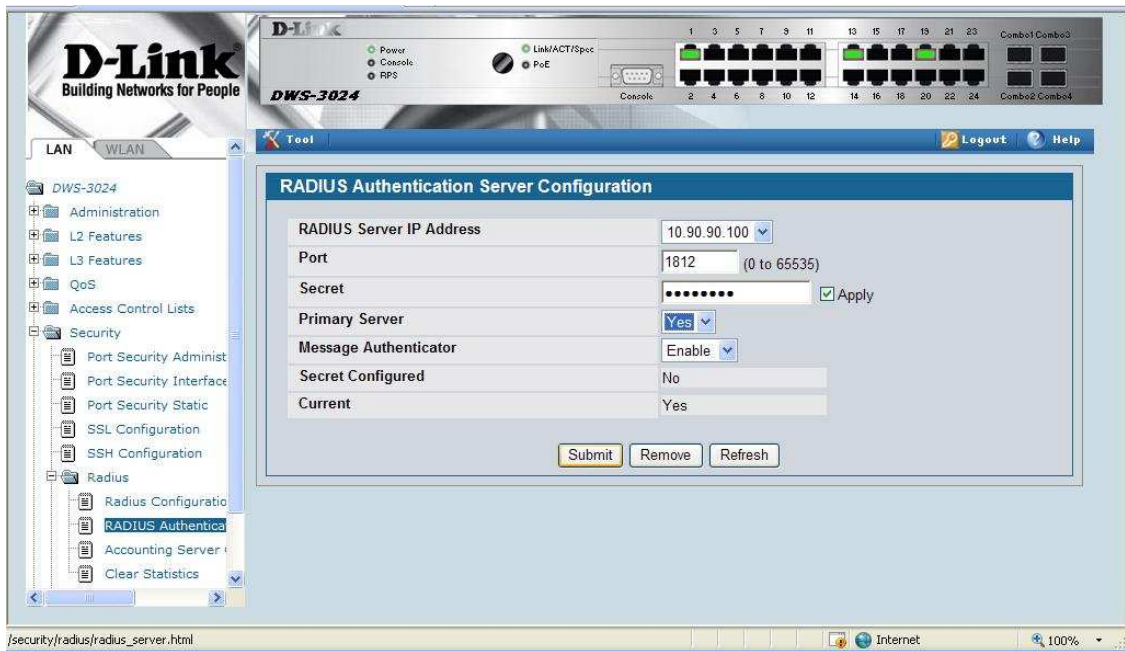
a. Go to LAN tab **Security** → **RADIUS** → **RADIUS Authentication Server Configuration**, select **Add** and give the 10.90.90.100 as the IP Address



b. Specify the following settings

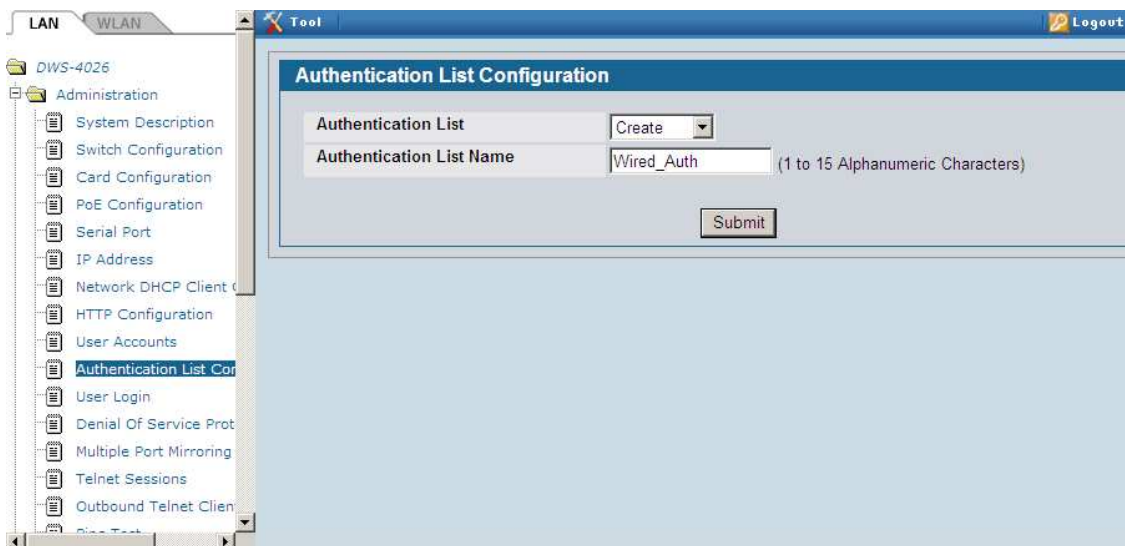
- **Port** – 1812
- **Secret** – 12345678 (Apply)
- **Primary Server** - Yes

Then press the “Submit”.

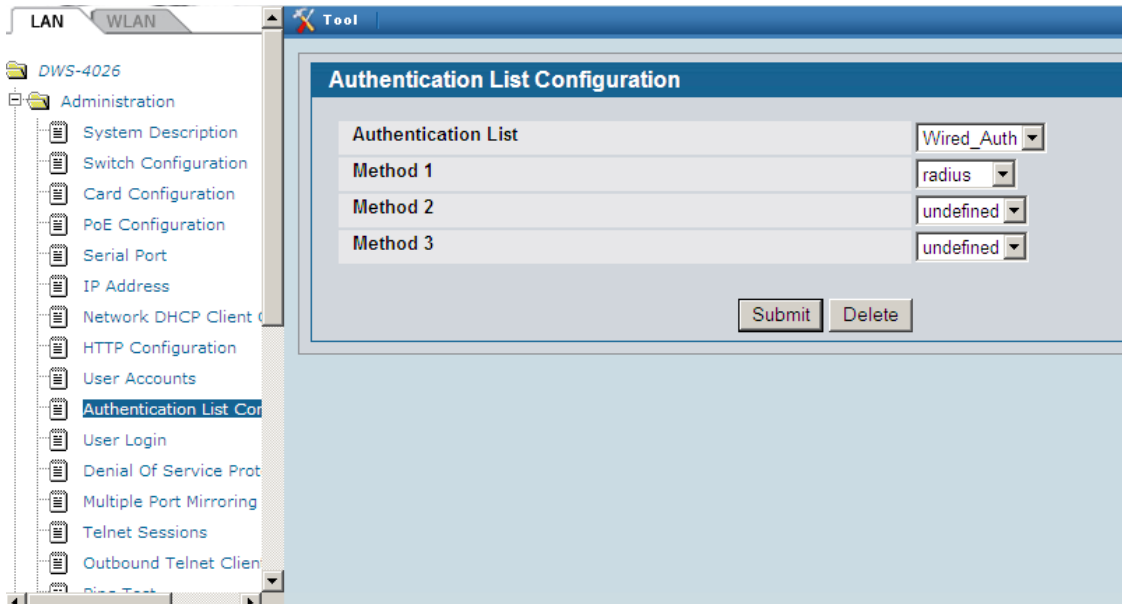


### 2.6.3. Add a new authentication list on switch.

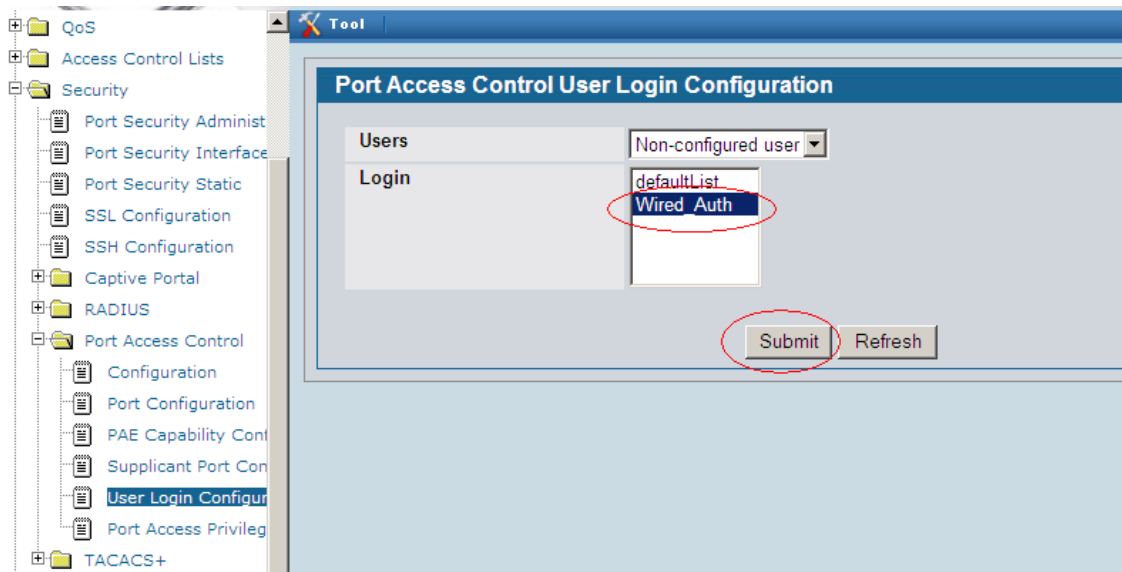
- a. Go to **LAN** tab → **Administration** → **Authentication List**, Select **Create** and give it a name as **Wired\_Auth**



- b. Set the radius as the first authentication method for this list.

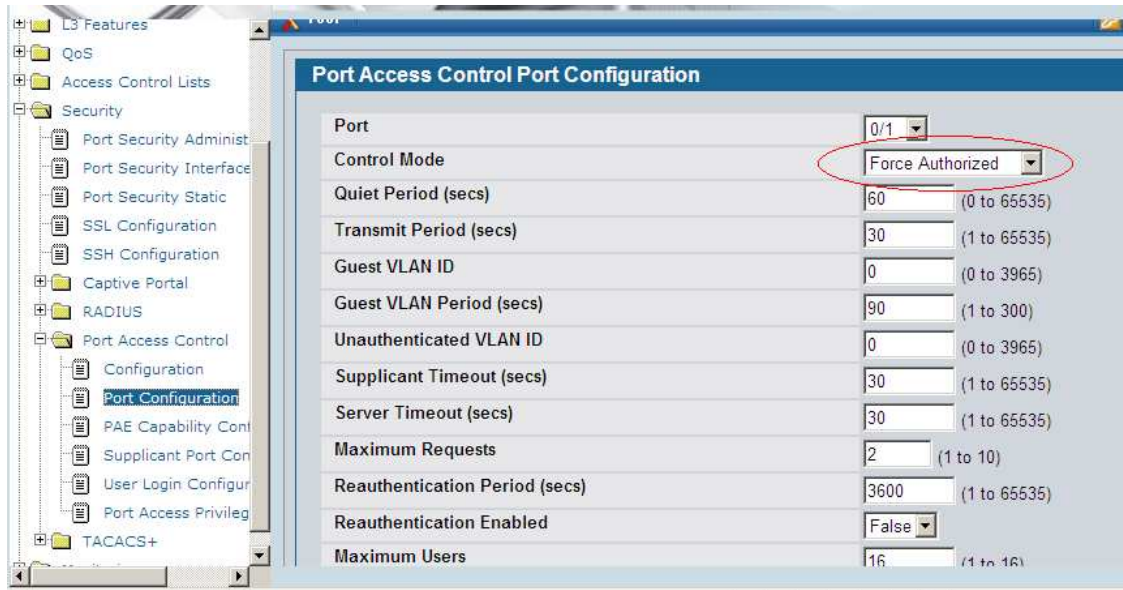


c. LAN → Security → Port Access Control → User Login Configuration, choose **Wired\_Auth**, and click **submit** to assign the Wire\_auth as the Non-configured user authentication list for 802.1x



#### 2.6.4. Configure the ports that don't need to be authenticated.

a. Go to LAN → Security → Port Access Control → Port Configuration, select **Port 0/1** and from the **Control Mode** option, select **Force Authorized**.



b. Do the same setting on **Port 0/20**

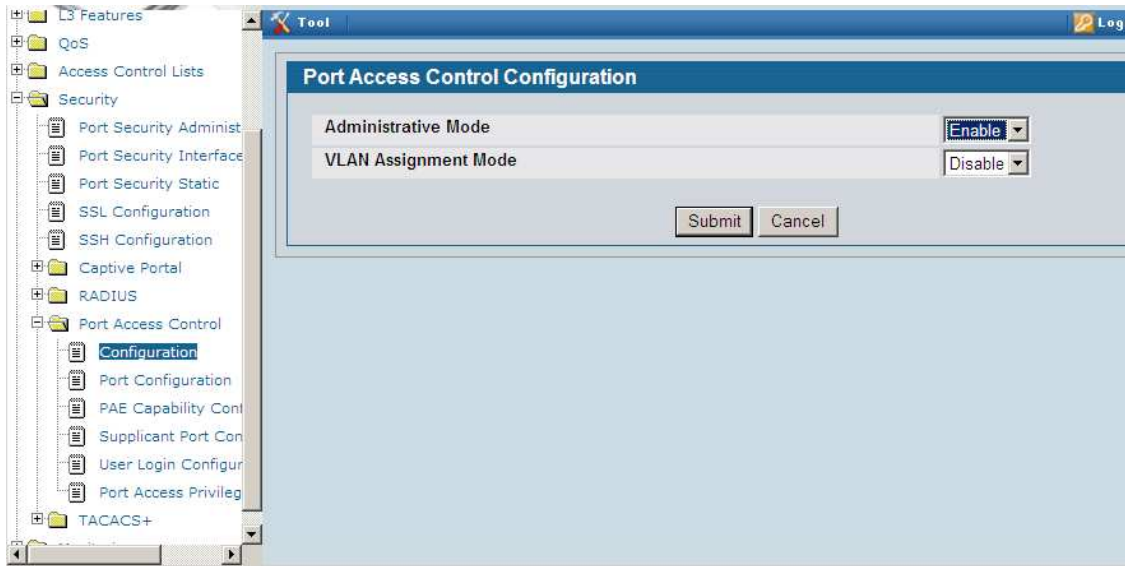
## 2.6.5. Enable the 802.1X

a. Connect your RADIUS Server to port 19, your PC that used to configure Switch connect to port 20

b. Enable the 802.1X

Go to **LAN → Security → Port Access Control → configuration**, Enable the **Administrative Mode**

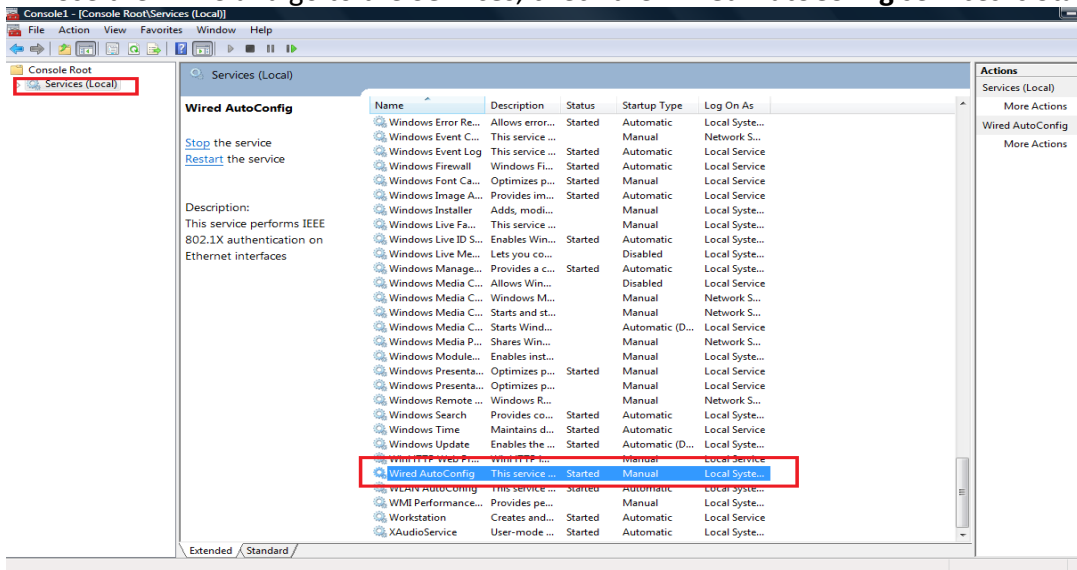
**NOTE:** Before you enable the 802.1X, please make sure you finish the step 2.6.4, and connect to the correct port, or you will loose all the connections.



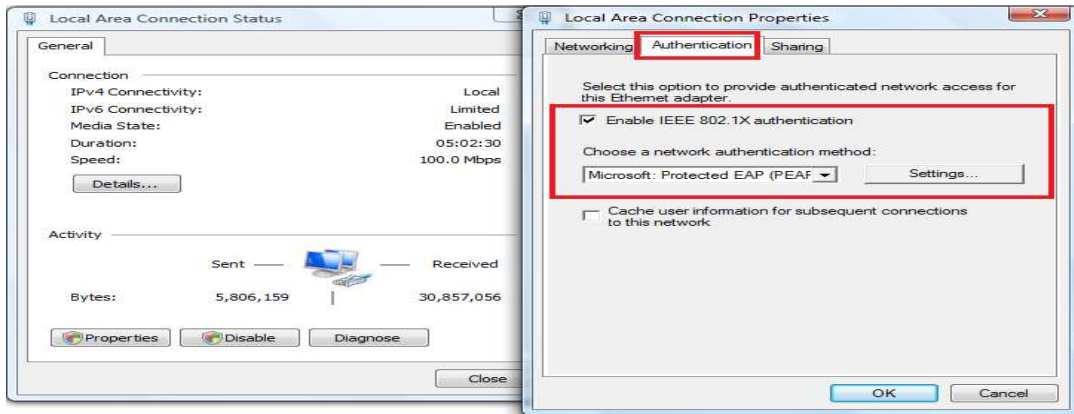
## 2.7 Configure the PC as the 802.1X supplicant.

[Client XP or Vista or Win7]:

1. Use the MMC and go to the **Services**, check the **Wired AutoConfig** services is Started.



2. Under the NIC setting, make sure the **Authentication** tab come up. Then click the **Settings** button.



3. Click the **Configure..** button and disselect the **Automatically.....**

