2.6 Enable IEEE802.1X on switch.
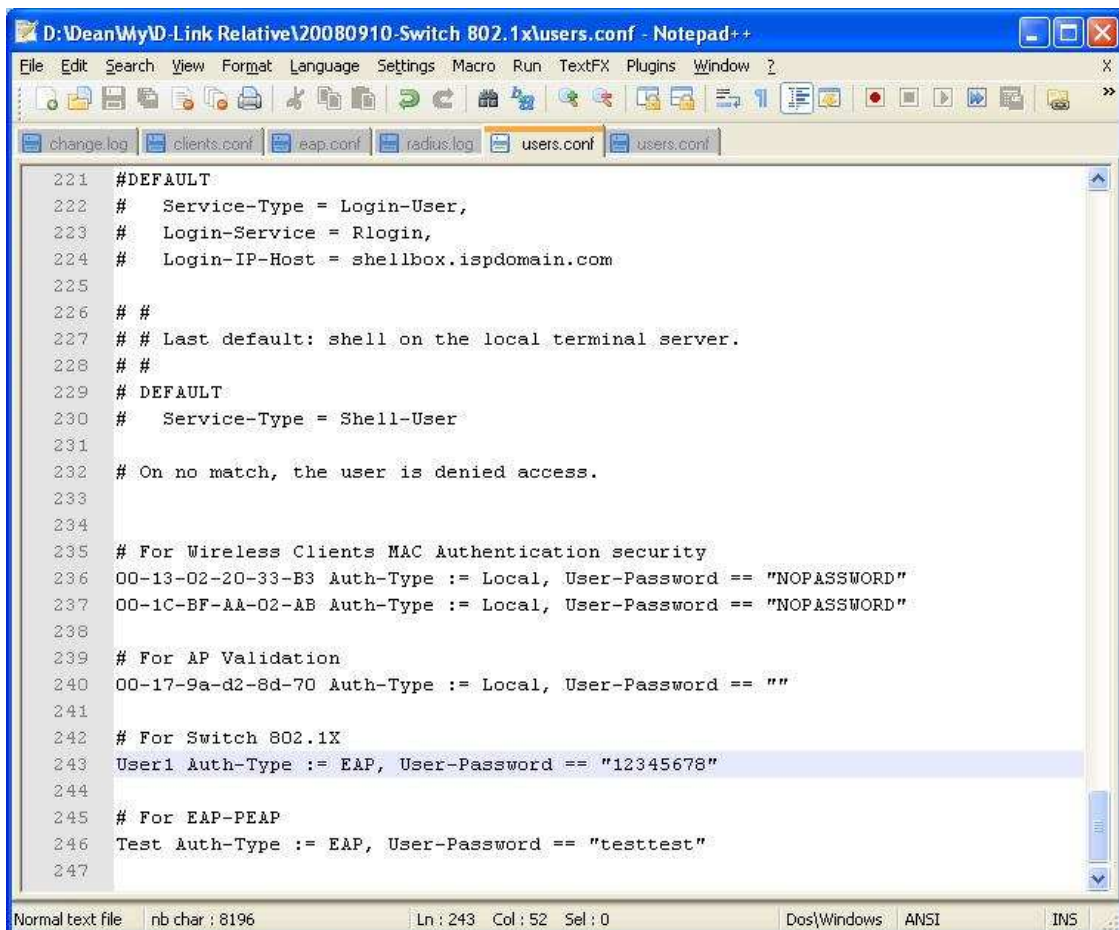
2.6.1. Setup your FreeRADIUS server

a. Setup the IP address of your RADIUS server to 10.90.90.100/8
b. 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
}
```

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

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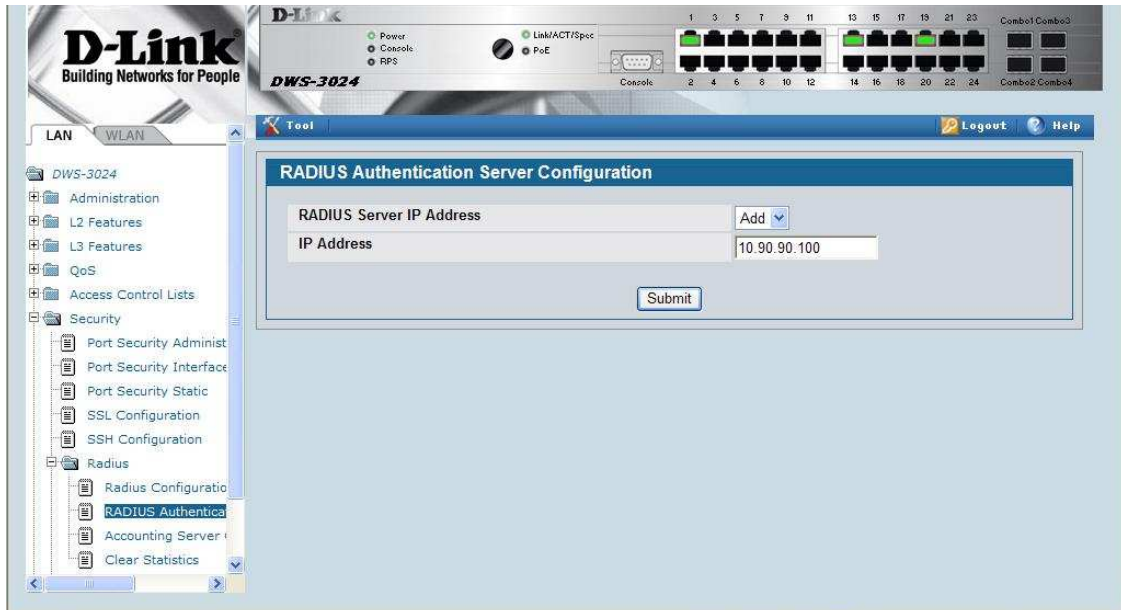

d. Save and restart your RADIUS server

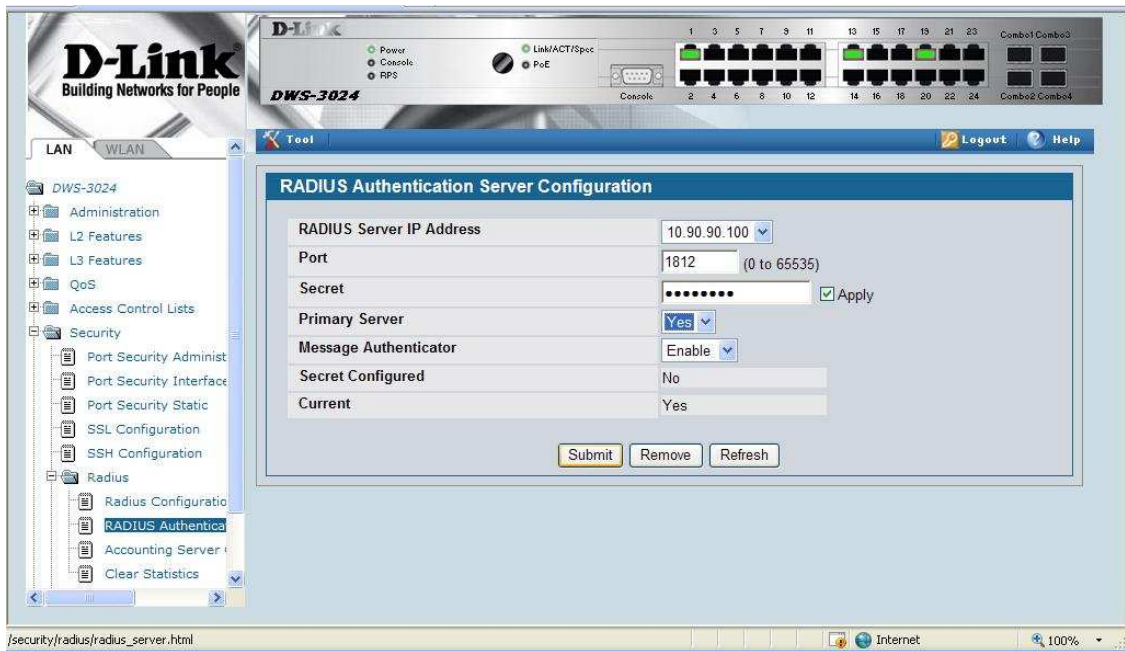## 2.6.2. Add the IP address of the RADIUS server on Switch, and give it correct settings

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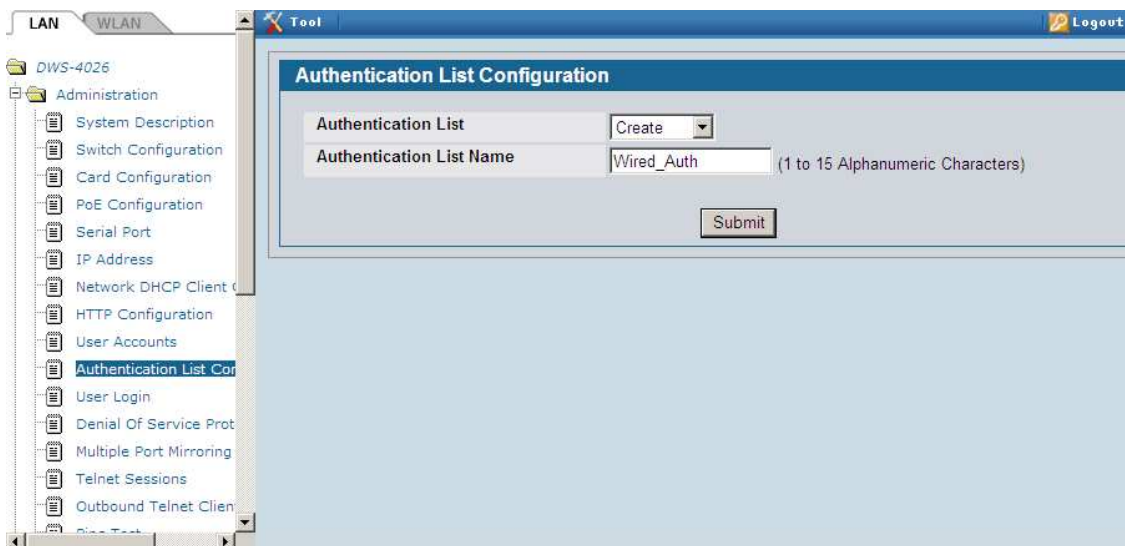

b. Specify the following settings

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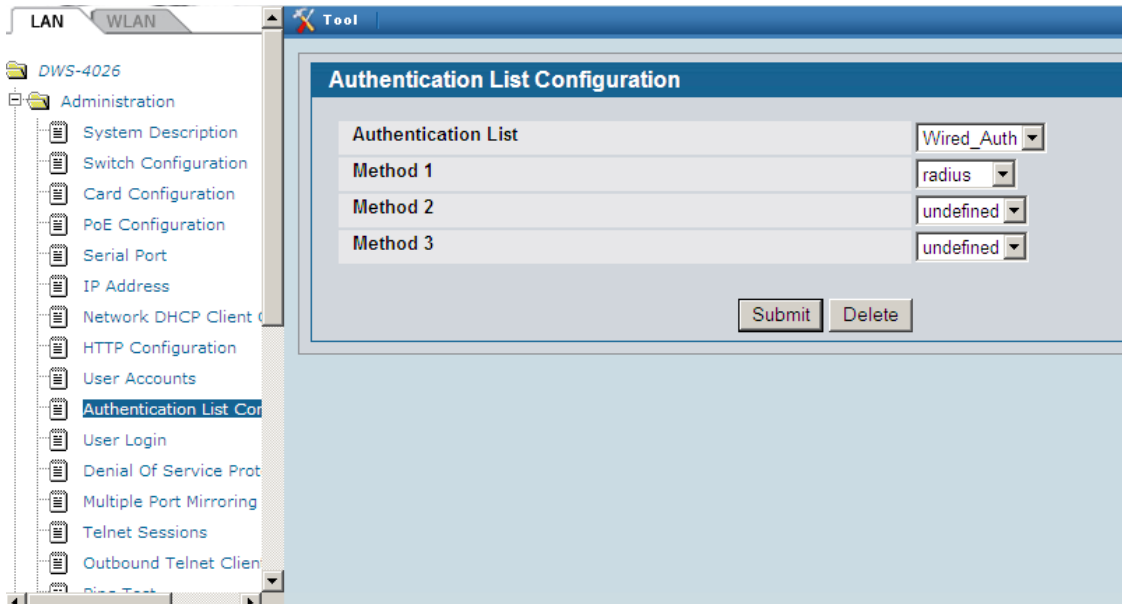- **Primary Server** - Yes

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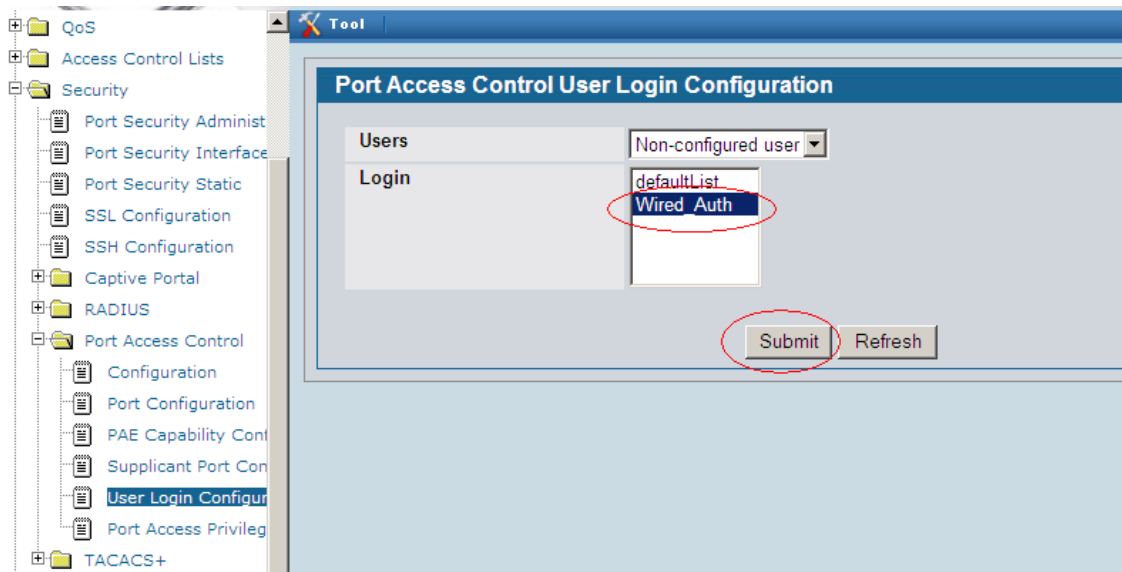
2.6.4. Configure the ports that don't need to be authenticated.

a. Go to **LAN → Security → Port Access Control → Port Configuration,** select **Port 0/1** and from the **Control Mode** option, select **Force Authorized.**
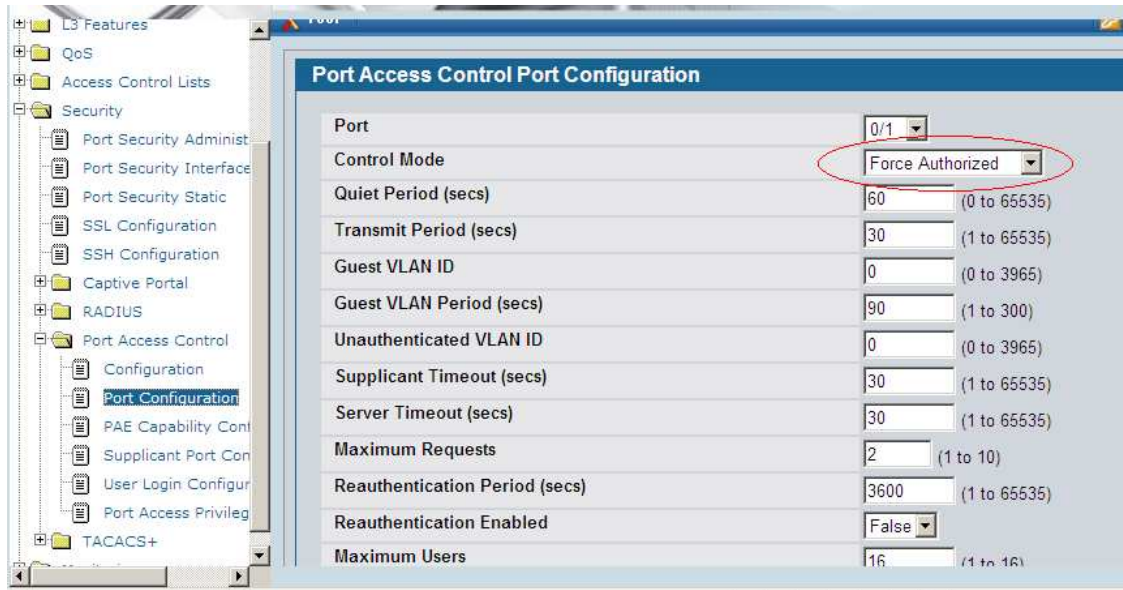
b. Do the same setting on **Port 0/20**

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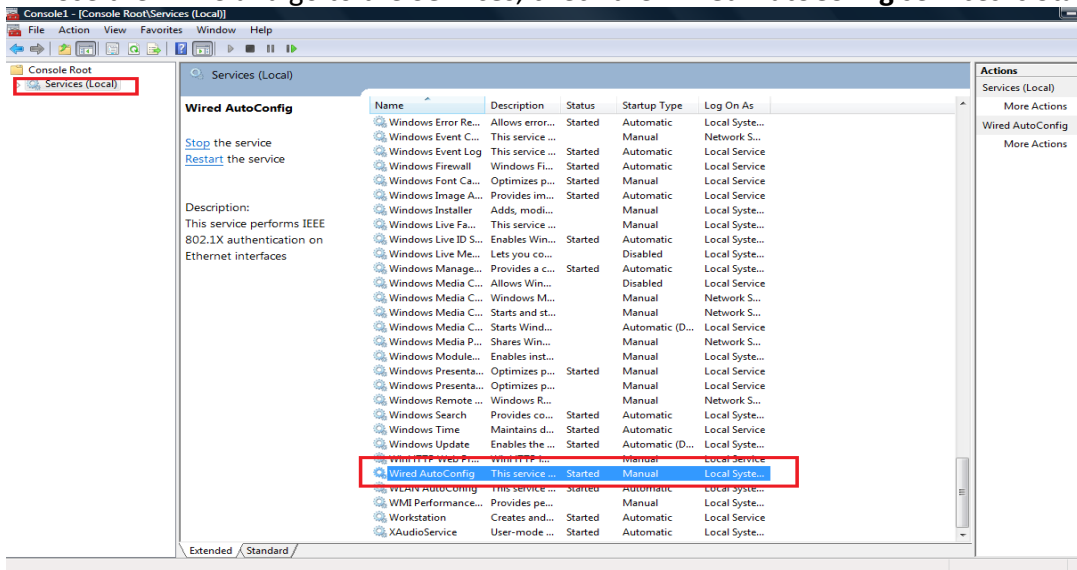
NOTE: Before you enable the 802.1X, please make sure you finish the step 2.6.4, and connect to the correct port, or you will loose all the connections.
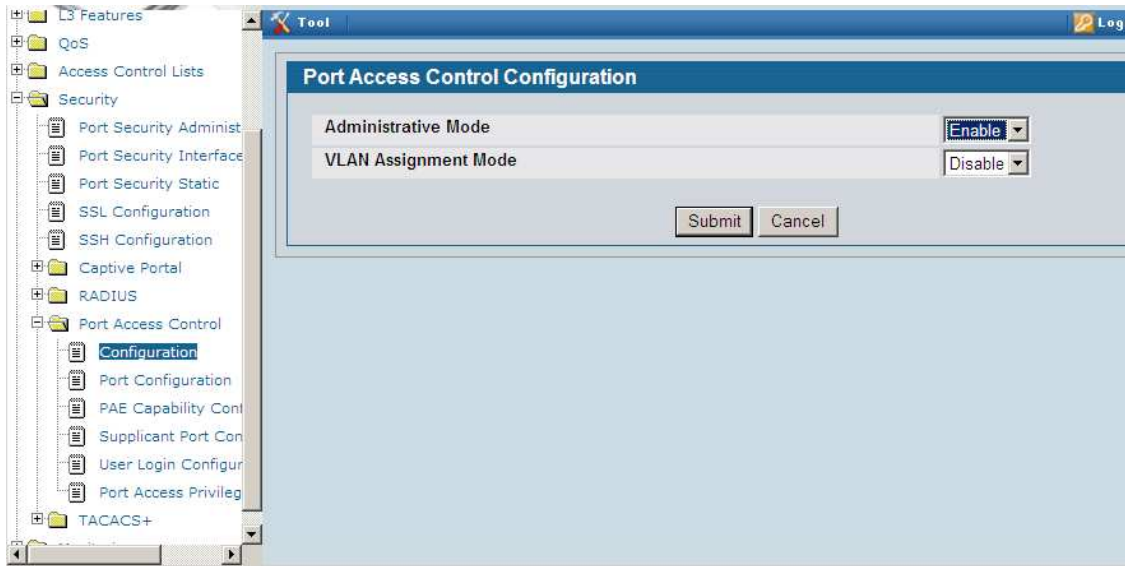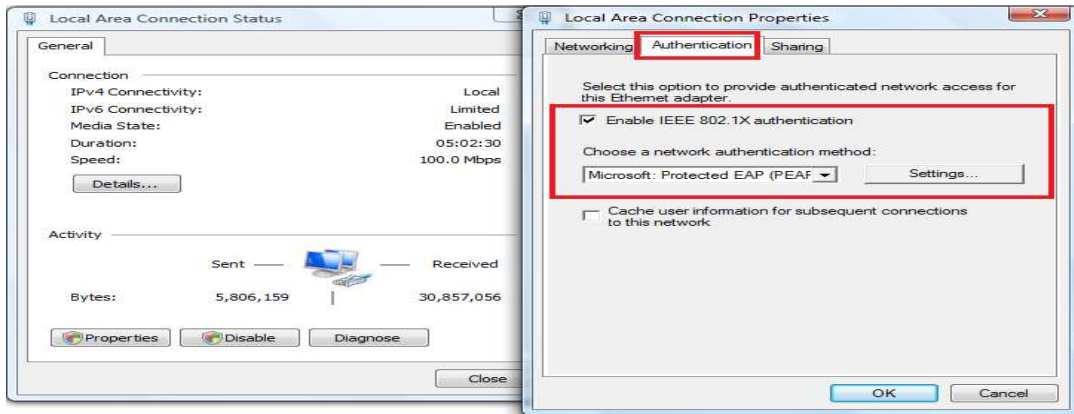
2.7 Configure the PC as the 802.1X supplicant.

[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……**