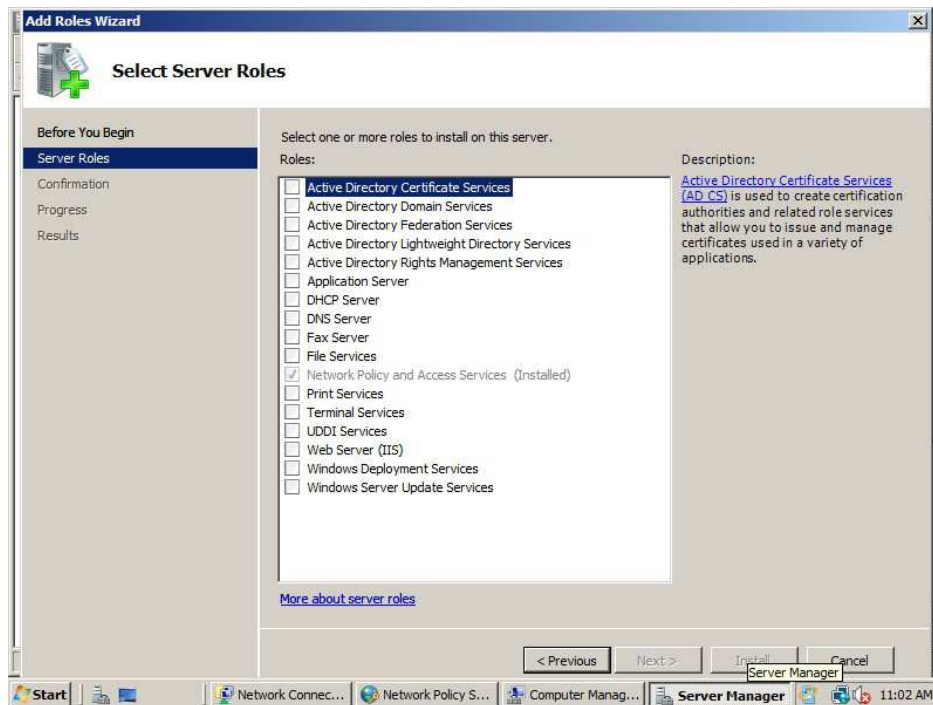**How to setup MAC-Based-Access-Control with Microsoft Windows Server 2008 NPS**
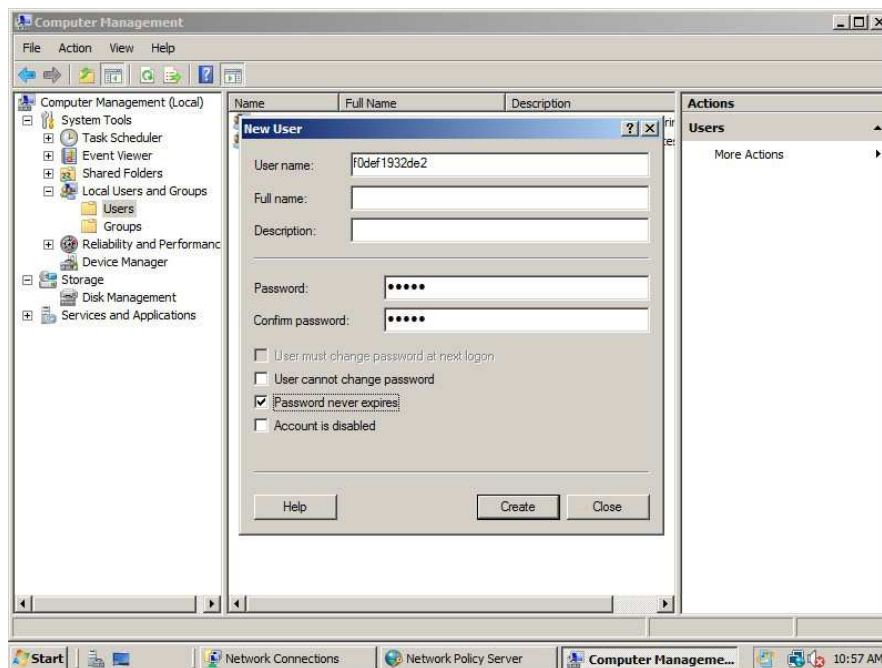
[Topology]

Client-------------DGS-3120-----------RADIUS Server

       (p2)   (p24)

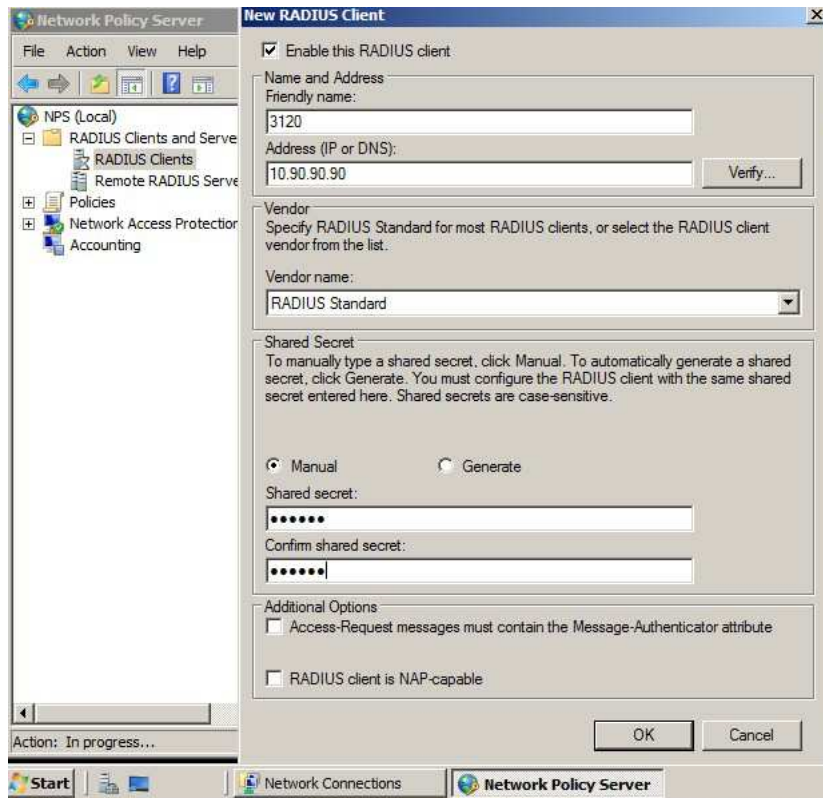   10.90.90.90   10.90.90.201
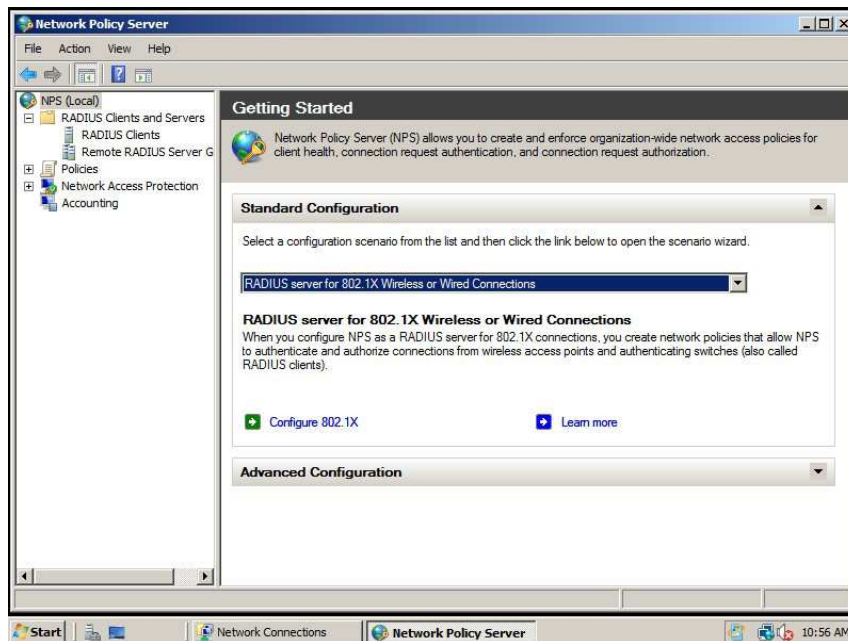
1. Install NPS role on Windows Server 2008.

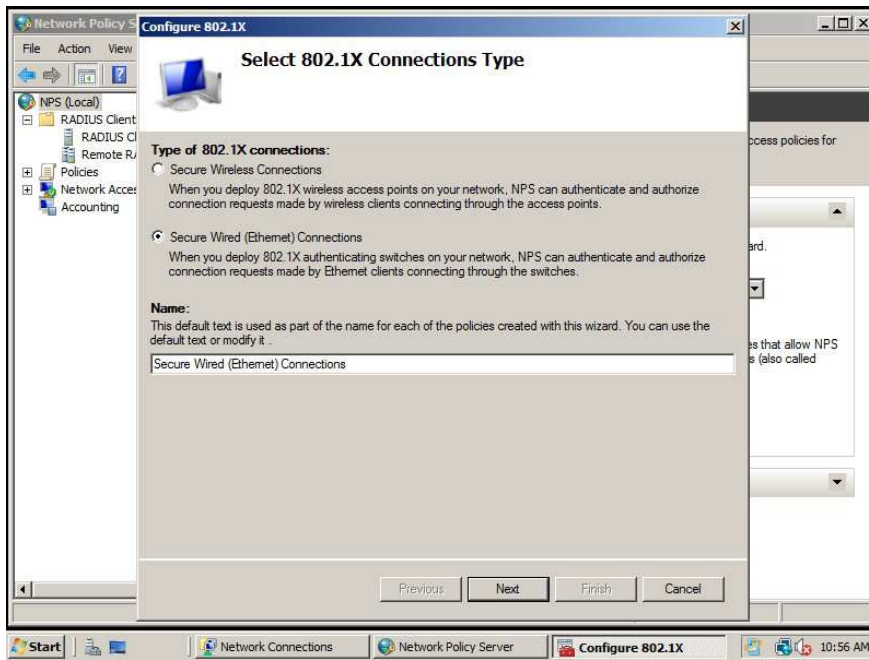2. Create a new username as allowed host MAC address, password is "dlink".

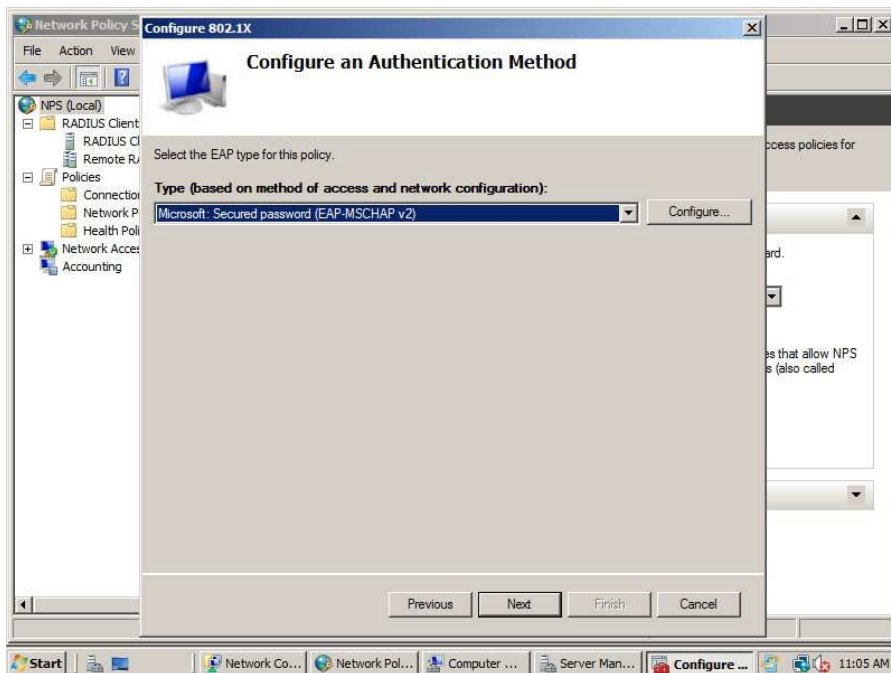3. Add RADIUS client (Switch) into NPS, key is 123456.

4. Create NPS policy as "RADIUS server for 802.1x Wireless or Wired connections".
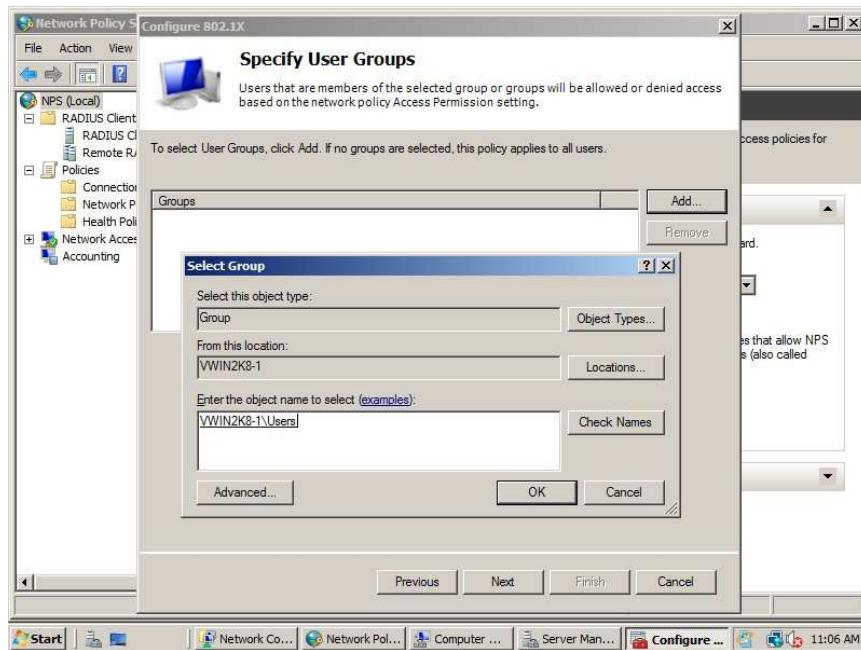

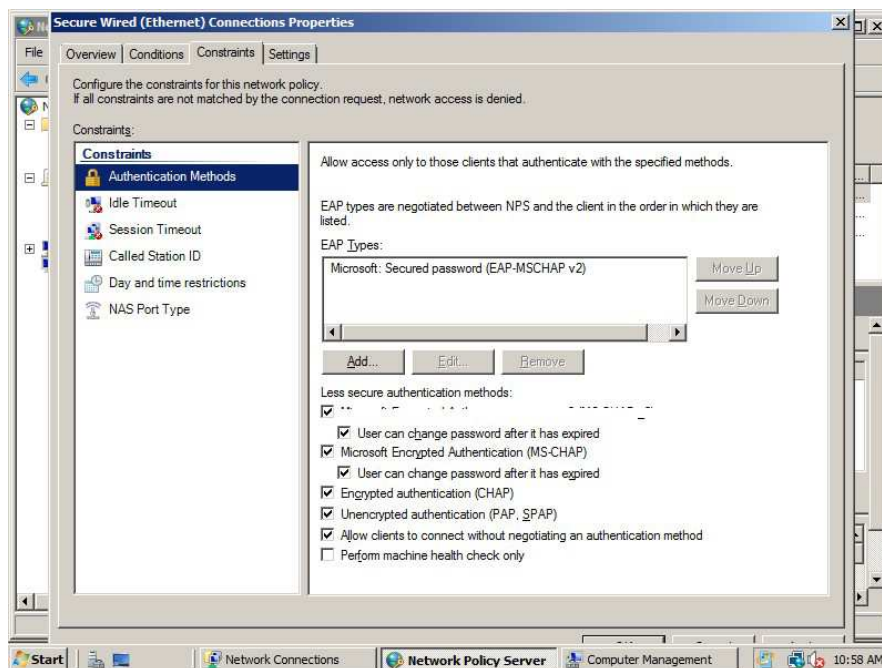5. Select Secure Wired (Ethernet) Connections.

6. EAP Type select "EAP-MSCHAP v2".

7. Add user groups.

8. Cliek "next" to finish.
9. Edit the policy, select "constraints" label. And check below options. Then click "OK" and ignore warning message.

Apply below command on switch:

config mac_based_access_control method radius

config mac_based_access_control password dlink //this password must be the same to step 2

config mac_based_access_control ports 1:1-1:8 state enable

enable mac_based_access_control

config radius add 1 10.90.90.201 key 123456 default //this key must be the same to step 3

After connect client on port 2, you can see RADIUS-Accept packet on Server side.
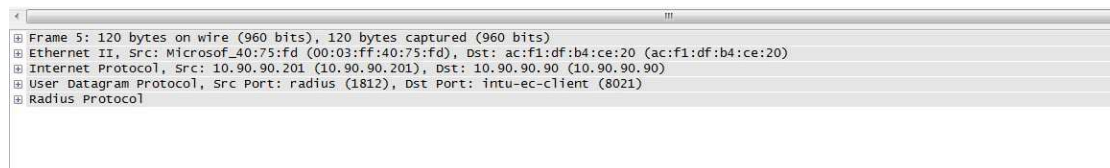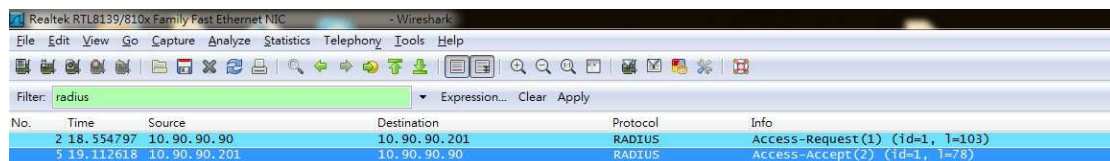
And show port status on Switch:

```
DGS-3120-24TC:admin#show mac_based_access_control auth_state ports 2
Command: show mac_based_access_control auth_state ports 1:2

(P): Port-based

Port MAC Address          State           VID  Priority  Aging Time/
                                                          Block Time
---- -------------------- --------------- ---- --------  ------------
1:2  F0-DE-F1-93-2D-E2    Authenticated   1    -         1440

Total Authenticating Hosts  : 0
Total Authenticated Hosts   : 1
Total Blocked Hosts         : 0

DGS-3120-24TC:admin#
```