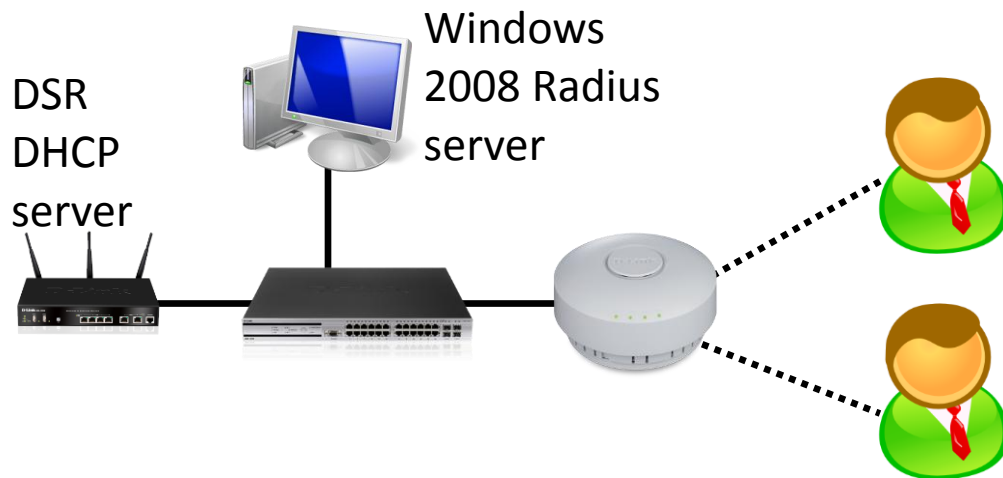


Windows 2008 dynamic vlan with DWS-4026



Introduction:

Here I provide the SOP to setup the “Dynamic vlans” for the Windows 2008 Radius server with DWS-4026.

To process this feature you need four steps, DHCP, here I use DSR, DWS, Windows Radius server, and the user’s laptop.

Step:

For the DHCP, here I used DSR, setting, what you need to take care is the tracking port.

First, you create the vlan2, and then modify the vlan2 IP as you want, as 1-1.

Second, you need to setup the port as trunk which DHCP server connect to the DWS, as 1-2.

1-1

Product Page: DWC-1000 Hardware Version: A1 Firmware Version: 4.1.0.2_10244W

D-Link

DWC-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard

WLAN Global Settings

AP Management

Internet Settings

Network Settings

QoS

GVRP

VPN Settings

VLAN Settings

DMZ Setup

USB Settings

MULTI VLAN SUBNET CONFIG LOGOUT

This page shows the list of available multiple VLAN subnets.

Save Settings Don't Save Settings

Please setup the DHCP server for vian1 and vlan2

MULTI VLAN SUBNET

Vlan ID: 2

IP Address: 192.168.0.1

Subnet Mask: 255.255.255.0

DHCP

DHCP Mode: DHCP Server

Domain Name: DLink

Starting IP Address: 192.168.0.100

Ending IP Address: 192.168.0.254

Helpful Hints...

By default, when you add a new VLAN, it is assigned an IP address of 192.168.2.1 with subnet-mask 255.255.255.0, the next added one is assigned 192.168.3.1 and so on. You can change the assigned IP address, subnet mask and many other options here. The only non-editable field in VLAN ID.

More...

1-2

Product Page: DWC-1000 Hardware Version: A1 Firmware Version: 4.1.0.2_10244W

D-Link

DWC-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard

WLAN Global Settings

AP Management

Internet Settings

Network Settings

QoS

GVRP

VPN Settings

VLAN Settings

DMZ Setup

PORT VLANs LOGOUT

This page allows user to configure the port VLANs. A user can choose ports and can add them into a VLAN.

Port VLANs

	Port Name	Mode	PVID	VLAN Membership
<input type="checkbox"/>	Port 1	Access	1	1
<input type="checkbox"/>	Port 2	Trunk	1	1, 2
<input type="checkbox"/>	Port 3	Access	1	1
<input type="checkbox"/>	Port 4	Access	1	1

Helpful Hints...

In order to tag all traffic through a specific LAN port with a VLAN ID, you can associate a VLAN to a physical port. The VLAN Port table displays the port identifier, the mode setting for that port and VLAN membership information. Go to the Available VLAN page to configure a VLAN membership that can then be associated with a port.

More...

2.

For the DWS, you need to setup the Radius setting, as 2-1, vlans setting, as 2-2 and the AP profile, as 2-3.

What you need to be careful is the vlan participation, should let the port which connect to the DHCP and AP participate with the vlan2, in my case, tagged.

2-1

The screenshot shows the D-Link web interface for configuring a RADIUS Authentication Server. The left sidebar shows the navigation tree with 'RADIUS Authentication' selected. The main panel is titled 'RADIUS Authentication Server Configuration' and contains the following fields:

- RADIUS Server Host Address: 10.50.12.1
- Port: 1812 (range 1 to 65535)
- Secret: [Redacted]
- Primary Server: Yes
- Message Authenticator: Enable
- Secret Configured: Yes
- Current: Yes
- RADIUS Server Name: Default-RADIUS-Server (range 1 to 32 characters)

Buttons at the bottom include 'Submit', 'Remove', and 'Refresh'. An 'Apply' checkbox is also present.

2-2

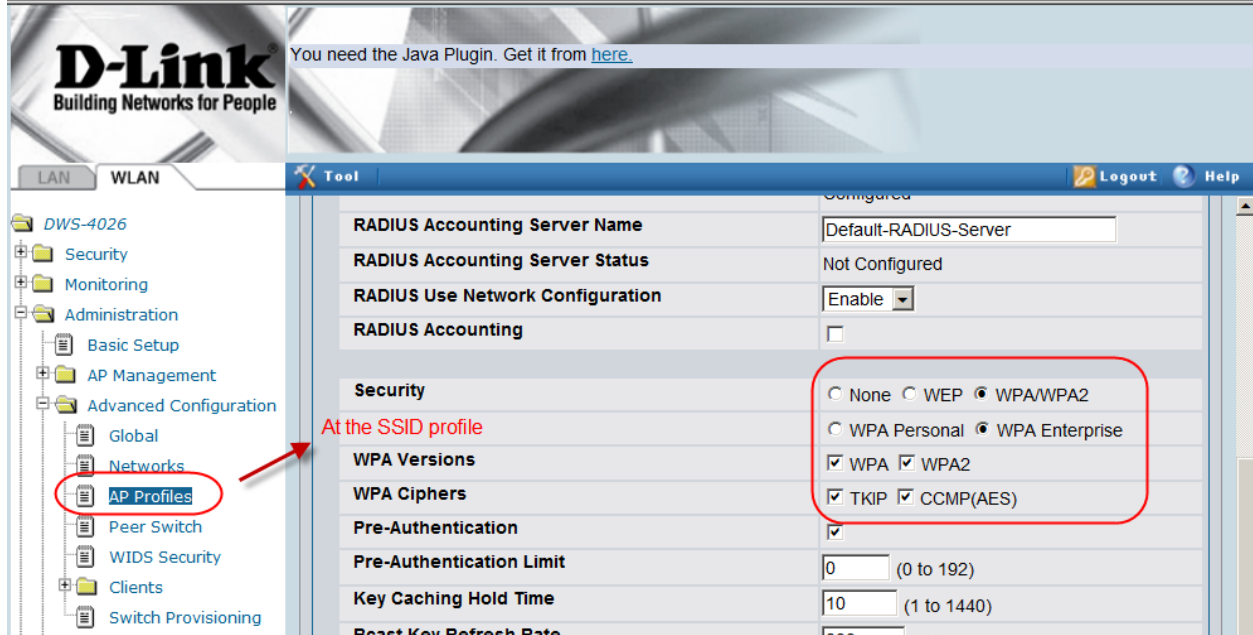
The screenshot shows the D-Link web interface for configuring a VLAN. The left sidebar shows the navigation tree with 'VLAN Configuration' selected. The main panel is titled 'VLAN Configuration' and contains the following fields:

- VLAN ID List: 2
- VLAN Name: [Redacted] (range 0 to 32 characters)
- VLAN Type: Static
- VLAN ID-Individual/Range: [Redacted] (range 1-4093)
- VLAN Participation All: [Unchecked]
- Participation All: Autodetect
- VLAN Participation: [Unchecked]
- Tagging All: [Unchecked]

A table below shows the VLAN participation and tagging for various interfaces:

Interface	Interface Status	Participation	Tagging
0/1	Exclude	Autodetect	Untagged
0/2	Include	Include	Tagged
0/3	Exclude	Autodetect	Untagged
0/4	Exclude	Autodetect	Untagged

A red arrow points to the 'Tagged' dropdown for interface 0/2, with a red text annotation: 'You need to set the Vlan2 participate with the tagged port for DHCP server and AP'.



3.

We can divide the windows setting for user and radius parts.

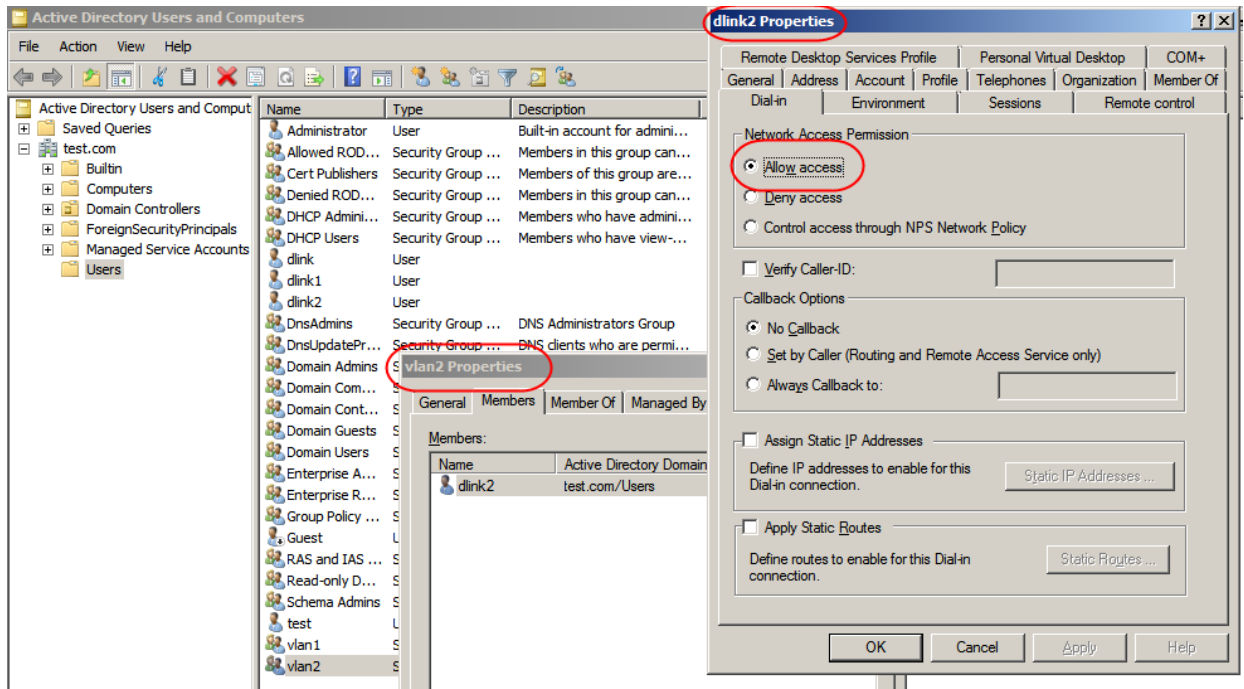
First, for user part, you need to create the groups for vlans. Ex: two group for two vlans, as 3-1

Second, for the radius part, you need to setup the radius client, connection require policy, and network policy. 3-2~3-5.

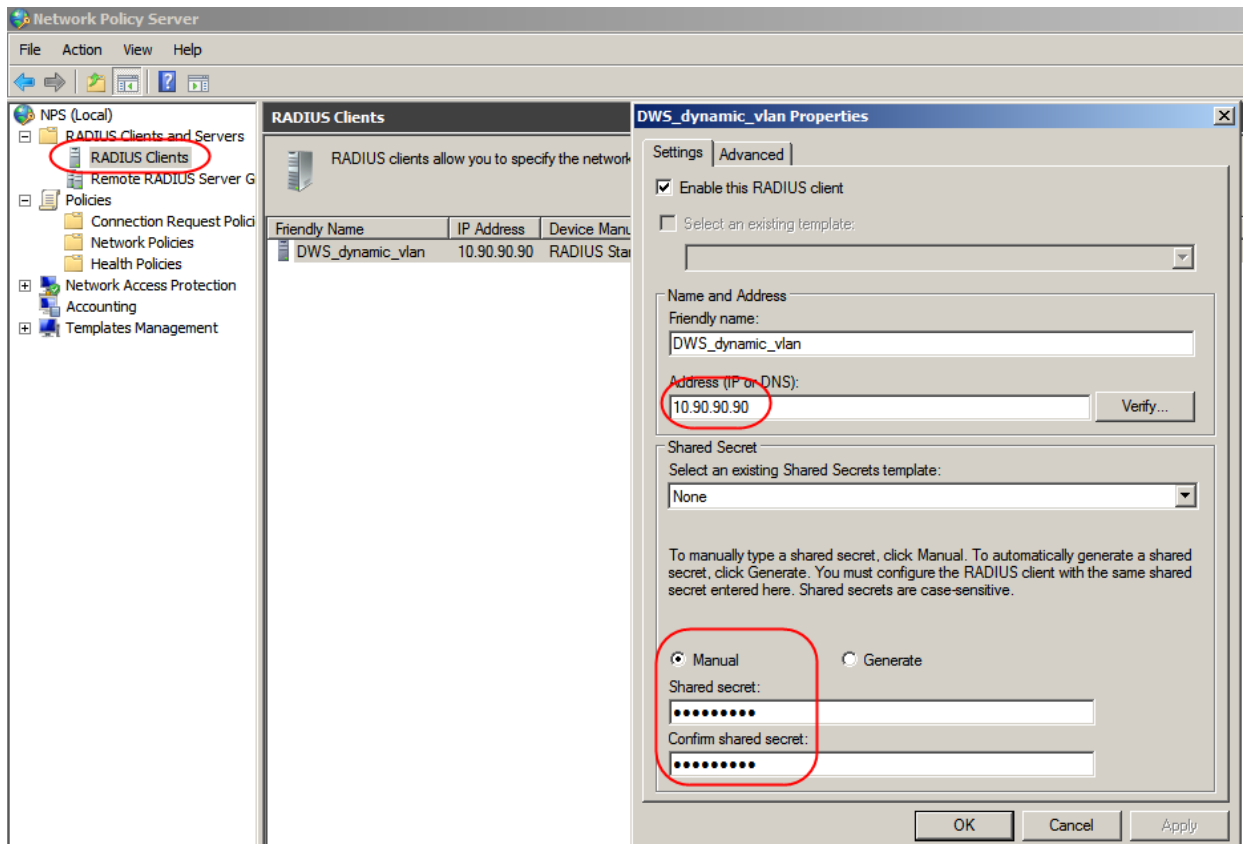
What you need to be careful is network policy. You need to create the network policy based on how many vlans you want, as 3-4.

And then, you need to setup the “constraint” for the network policy. Remove the previous setting, and then add the Tunnel-media-type, Tunnel-pvt-group-ID, and Tunnel-type, as 3-5.

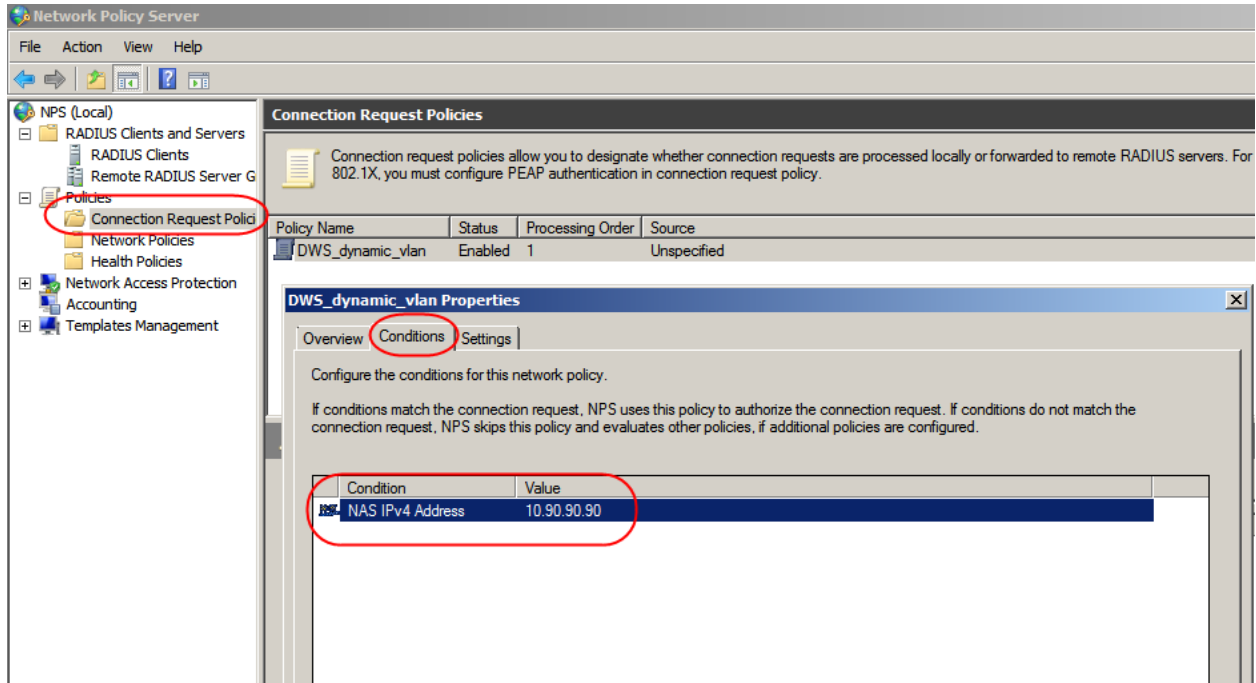
3-1



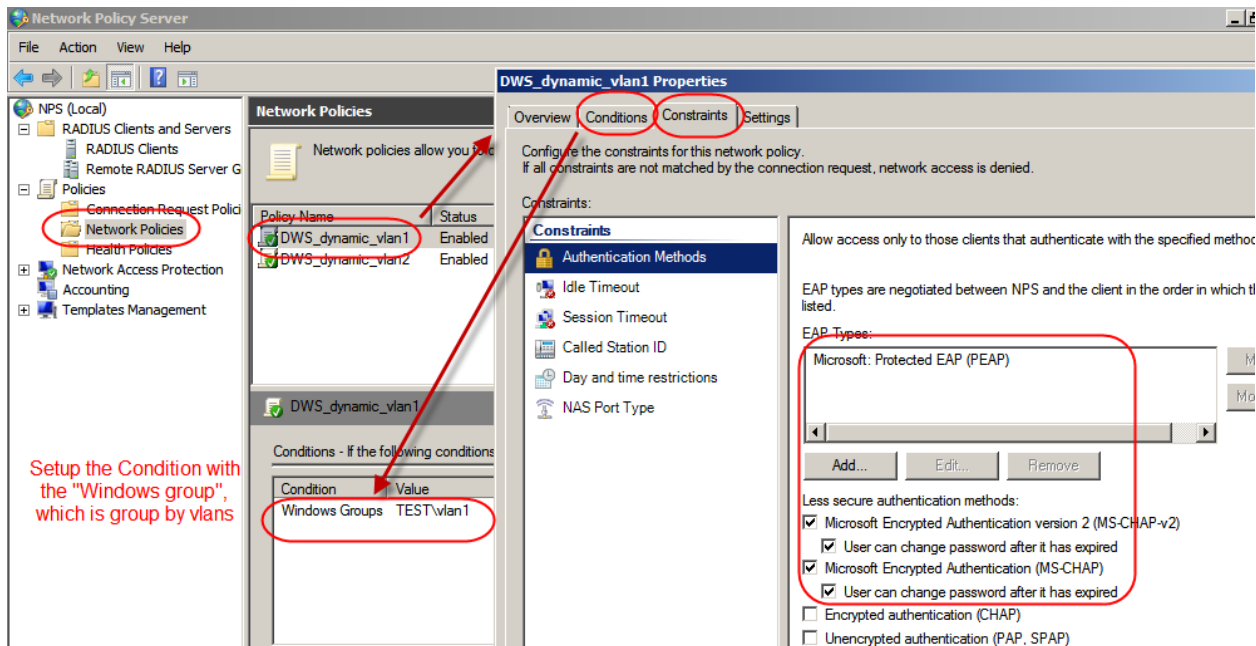
3-2



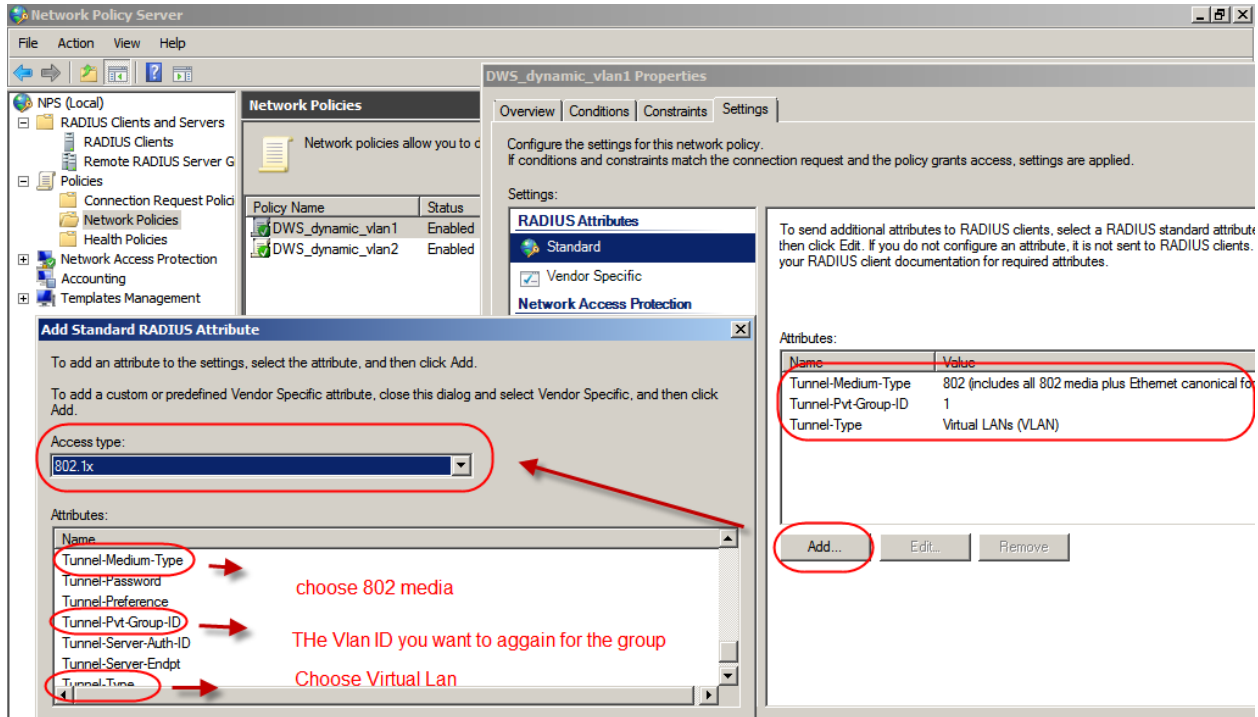
3-3



3-4



3-5

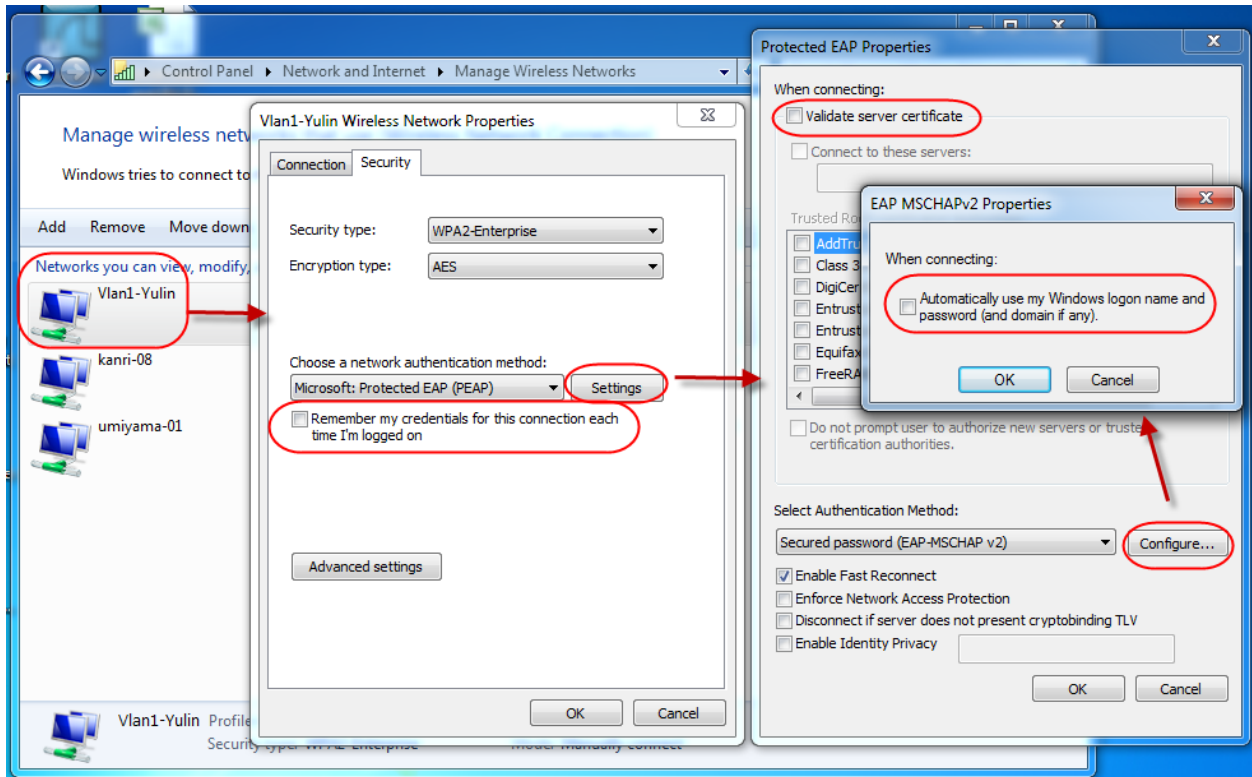


4.

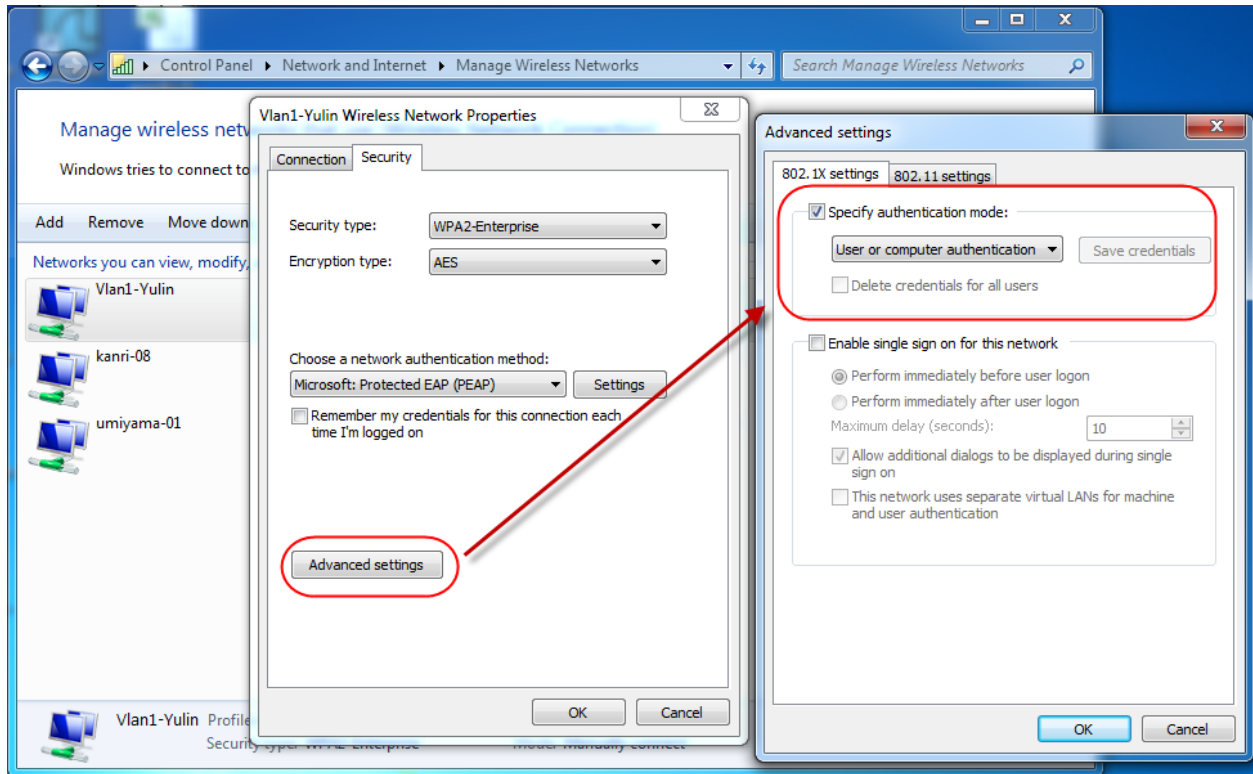
The last but not least, you need to setup the user's laptop, as 4-1 and 4-2.

Nothing special, but please follow the setting, for the security type, please refer to your setting.

4-1



4-2



End of the document