

How to create NAP (dynamic VLAN) setting in freeRADIUS (Linux) and DAP-2610.

Topology :

Internet---Router---LAN1---for freeRADIUS server (192.168.2.150/24)
|---LAN4---for DAP-2610 (192.168.2.50/24)

(following is vlan setting on LAN 4)

(untag for 192.168.2.x/24,enable DHCP)

(VID 10 for 192.168.110.x/24,enable DHCP, for Dynamic VLAN use v10 setting)

(VID 30 for 192.168.130.x/24,disable DHCP, for Dynamic VLAN use v30 setting)

(VLAN mode in Port VLAN setting is "General")

Router is DSR-250 HW:C1 FW:v.3.17_WW

DAP-2610 HW:A1 FW:v.2.06rc087 and v.2.01rc067

First, we need ready freeRADIUS server setting, please complete these settings,

1.setup done clients.conf, e.x:

```
client 192.168.0.0/16 {
    secret          = 12345678
    shortname       = private-network-2
}
```

2.add available dynamic vlan user in users file. e.x:

```
v10          Auth-Type := EAP, User-Password := "111111"
             Tunnel-Type = "VLAN",
             Tunnel-Medium-Type = "IEEE-802",
             Tunnel-Private-Group-Id = 10
v30          Auth-Type := EAP, User-Password := "111111"
             Tunnel-Type = "VLAN",
             Tunnel-Medium-Type = "IEEE-802",
             Tunnel-Private-Group-Id = "30"
```

3.check peap setting in EAP.conf. (If it does not exist, please add it)

```
copy_request_to_tunnel = yes
```

```
use_tunneled_reply = yes
```

4.Make sure there is no problem with normal operation of freeRADIUS server.

This Setup GUIDE content included:

- 1.Configure the WPA-Enterprise Authentication for freeRADIUS server and NAP (Dynamic VLAN) in the DAP-2610.
- 2.Config Wireless client for windows 10 and result.

Configure the WPA-Enterprise Authentication for freeRADIUS server and NAP (Dynamic VLAN) in the DAP-2610.

1. Go to Wireless Settings page, and select "Authentication" to "WPA-Enterprise".
 2. Select WPA Mode to "WPA2 only" and Cipher Type to "AES", and enable Network Access Protection in the RADIUS Server Settings.
- (Also can use default auto wpa settings.)
3. Enter RADIUS server information in the "Primary RADIUS Server Setting"
- *2.4G also do the same settings.

The screenshot displays the 'Wireless Settings' configuration page for a DAP-2610 device. The left sidebar shows a navigation tree with 'Basic Settings' expanded, including 'Wireless', 'LAN', and 'IPv6'. The main content area is titled 'Wireless Settings' and contains the following configuration options:

- Wireless Band: 5GHz
- Mode: Access Point
- Network Name (SSID): 2610_NAP_5G
- SSID Visibility: Enable
- Auto Channel Selection: Disable
- Channel: 149
- Channel Width: Auto 20/40/80 MHz
- Authentication: WPA-Enterprise

The 'RADIUS Server Settings' section is highlighted with a red box and includes:

- WPA Mode: WPA2 Only
- Cipher Type: AES
- Group Key Update Interval: 3600 (Sec)
- Network Access Protection**: Network Access Protection is set to Enable.
- RADIUS Server Mode**: RADIUS Server is set to External.
- Primary RADIUS Server Setting**: RADIUS Server is 192.168.2.150, RADIUS Port is 1812, and RADIUS Secret is 12345678.

4.Enable the VLAN status in VLAN Settings page.
(Make sure the PVID Auto Assign Status is Disable)

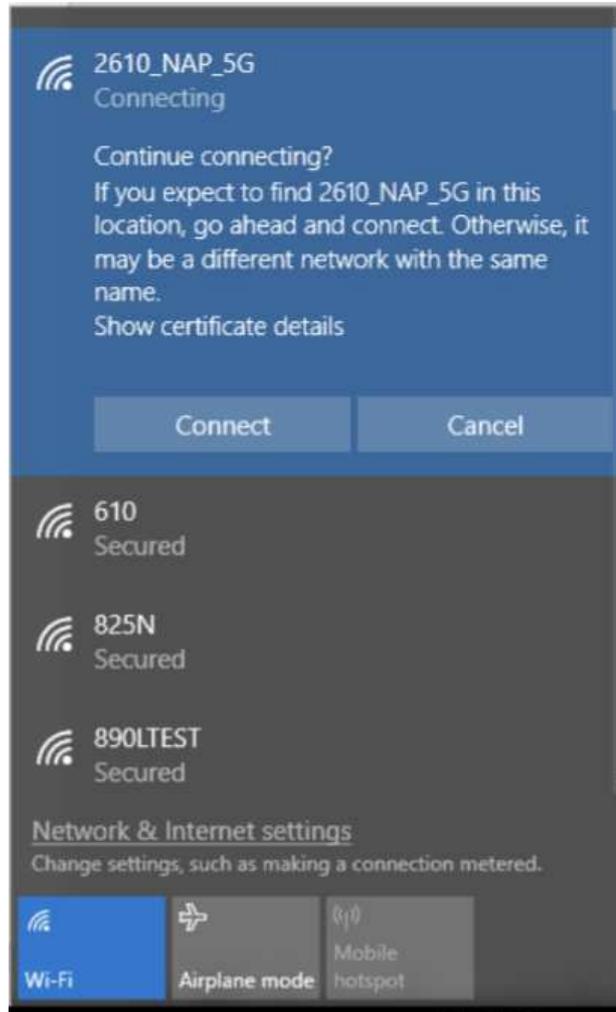
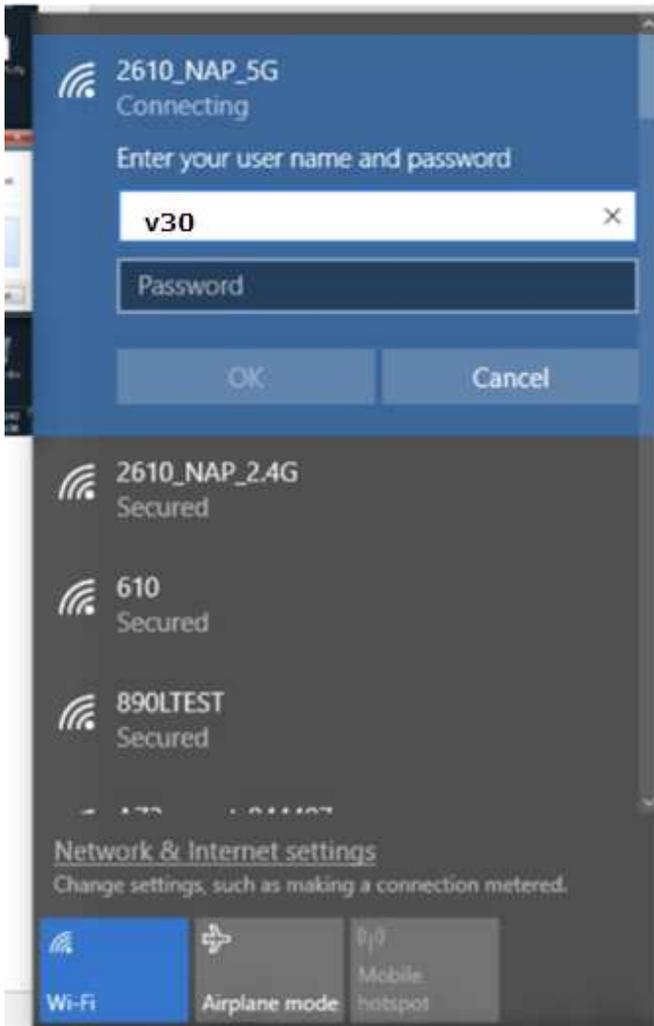
The screenshot shows the 'VLAN Settings' page for a DAP-2610 device. The 'VLAN Status' is set to 'Enable' (highlighted with a red box). The 'VLAN Mode' is set to 'Dynamic(2.4G), Dynamic(5G)'. A 'Save' button is visible. Below the settings is a table with tabs for 'VLAN List', 'Port List', 'Add/Edit VLAN', and 'PVID Setting'. The 'VLAN List' tab is active, showing a table with columns: VID, VLAN Name, Untag VLAN Ports, Tag VLAN Ports, Edit, and Delete. The table contains one entry for VID 1, VLAN Name 'default', and a list of ports: Mgmt, LAN, Primary(2.4G), S-1(2.4G), S-2(2.4G), S-3(2.4G), S-4(2.4G), S-5(2.4G), S-6(2.4G), S-7(2.4G), W-1(2.4G), W-2(2.4G), W-3(2.4G), W-4(2.4G), W-5(2.4G), W-6(2.4G), W-7(2.4G), W-8(2.4G), Primary(5G), S-1(5G), S-2(5G), S-3(5G), S-4(5G), S-5(5G), S-6(5G), S-7(5G), W-1(5G), W-2(5G), W-3(5G), W-4(5G), W-5(5G), W-6(5G), W-7(5G), W-8(5G).

| VID | VLAN Name | Untag VLAN Ports | Tag VLAN Ports | Edit | Delete |
|-----|-----------|---|----------------|------|--------|
| 1 | default | Mgmt, LAN, Primary(2.4G), S-1(2.4G), S-2(2.4G), S-3(2.4G), S-4(2.4G), S-5(2.4G), S-6(2.4G), S-7(2.4G), W-1(2.4G), W-2(2.4G), W-3(2.4G), W-4(2.4G), W-5(2.4G), W-6(2.4G), W-7(2.4G), W-8(2.4G), Primary(5G), S-1(5G), S-2(5G), S-3(5G), S-4(5G), S-5(5G), S-6(5G), S-7(5G), W-1(5G), W-2(5G), W-3(5G), W-4(5G), W-5(5G), W-6(5G), W-7(5G), W-8(5G) | | | |

5.Go to configuration->Save and activated to save and activated setting. Finish this part.

Config Wireless client for windows 10 and result.

1. Enter we created user account and password in the win10 client wireless connection list. (v10/111111 or v30/111111)
2. Then Click "Connect".



3. Because we use dynamic vlan user "v30" to login wireless, So will get IP address for 192.168.130.x/24. This means the setting is completed and the operation is successful in freeRADIUS server and DAP-2610.

