

How to create VLAN and set up dhcp with different vlans on the DSR-Series

[Topology]:

PC1------(P1)DSR-1000N

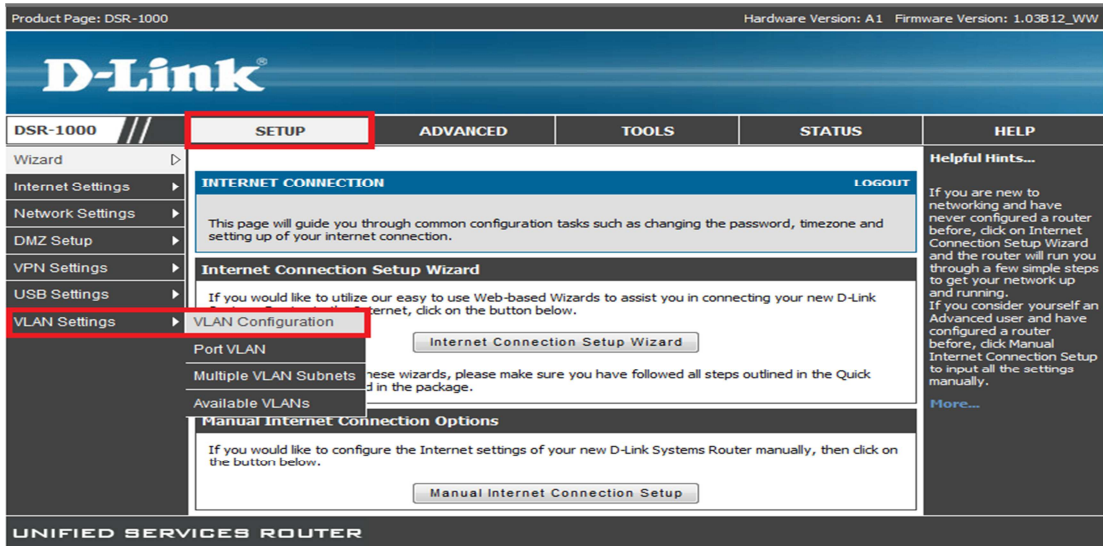
PC2------(P2)

DSR-1000N :firmware 1.03B12

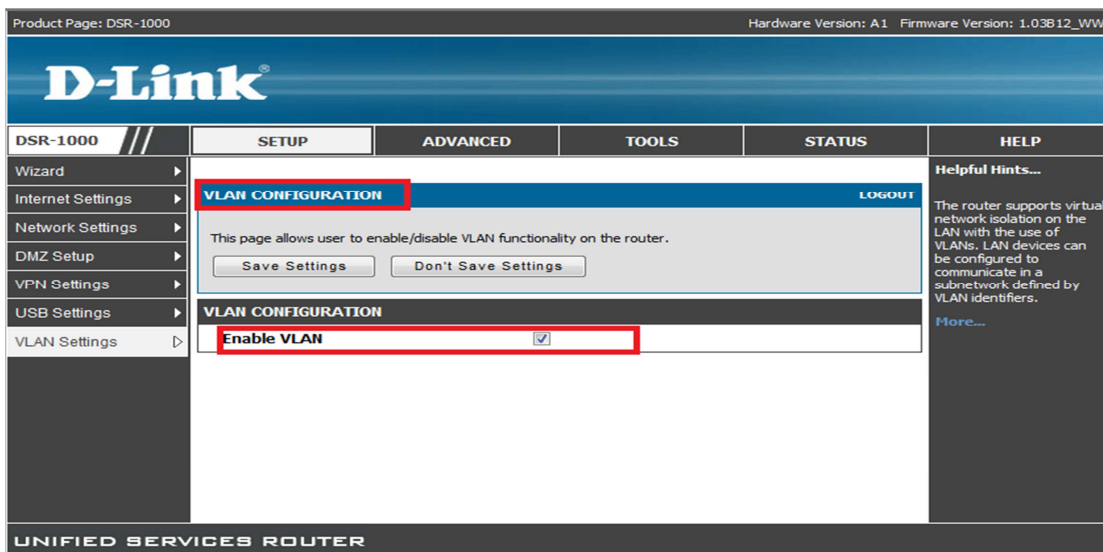
PC1 and PC2 are dhcp_clients

[Configuration]:

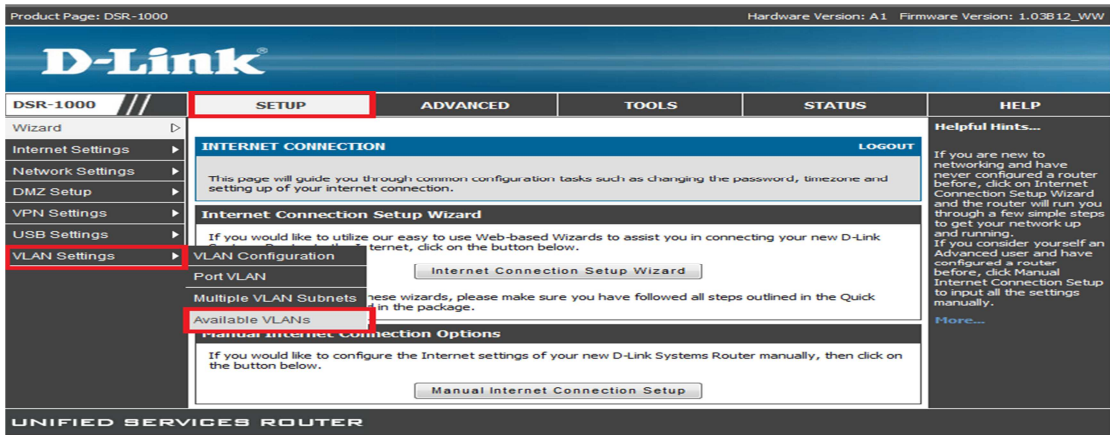
1.Under **SETUP->VLAN Settings**, click **VLAN Configuration** like the figure shown.



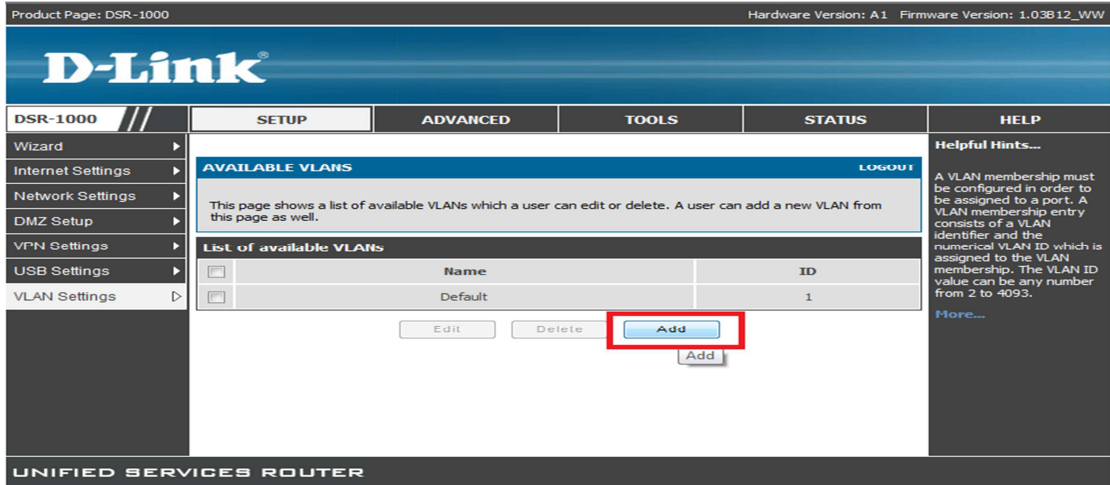
2Make sure the **Enable VLAN** has been selected.



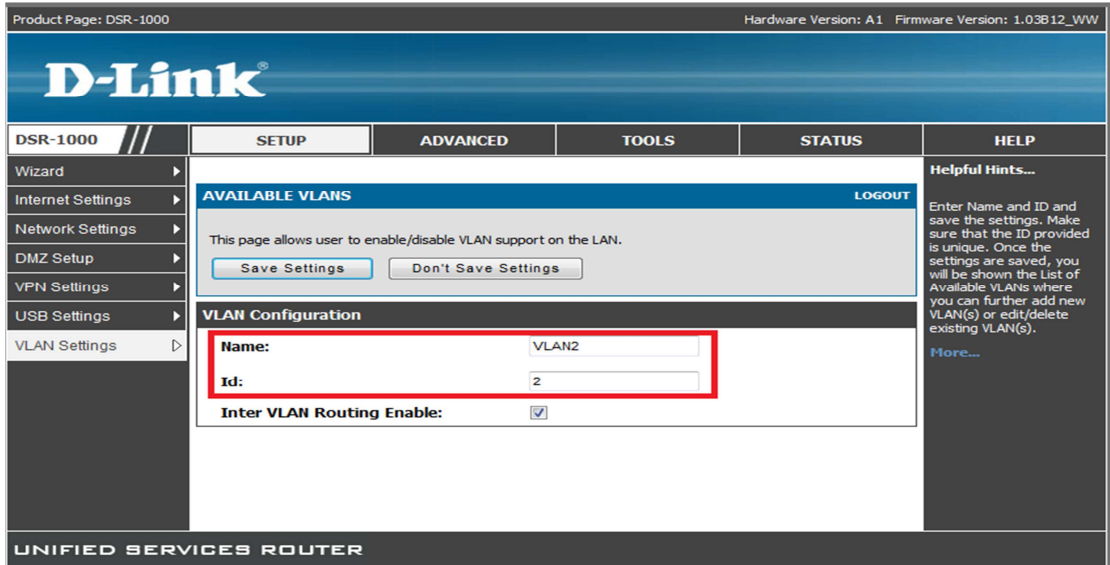
3. Under the **SETUP->VLAN Settings**, click the **Available VLANs**.



4. Click **Add** to create the VLAN in this page.



5. Input the **Name** and **Id** like following and then click **Save Settings**.



6. Under **SETUP-> VLAN Settings**, click **Multiple VLAN Subnets** like the figure shown belows.

Product Page: DSR-1000 Hardware Version: A1 Firmware Version: 1.03812_WW

Operation succeeded

AVAILABLE VLANS LOGOUT

This page shows a list of available VLANs which a user can edit or delete. A user can add a new VLAN from this page as well.

List of available VLANs

Name	ID
Default	1
VLAN2	2

Edit Delete Add

Helpful Hints...
A VLAN membership must be configured in order to be assigned to a port. A VLAN membership entry consists of a VLAN identifier and the numerical VLAN ID which is assigned to the VLAN membership. The VLAN ID value can be any number from 2 to 4093.
More...

UNIFIED SERVICES ROUTER

7. Select the VLAN you want to modify and click **Edit**.

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MULTI VLAN SUBNETS LOGOUT

This page shows a list of available multi-vlan subnets. User can even edit the multi-vlans from this page.

MULTI VLAN SUBNET List

Vlan ID	IP Address	Subnet Mask
<input type="checkbox"/>	1	192.168.10.1 255.255.255.0
<input checked="" type="checkbox"/>	2	192.168.2.1 255.255.255.0

Edit Edit

Helpful Hints...
Each VLAN can be assigned a unique IP address and subnet mask for the virtually isolated network. Unless inter-VLAN routing is enabled, the VLAN subnet will determine the network addresses on the LAN that can communicate to devices that correspond to this VLAN.
More...

UNIFIED SERVICES ROUTER

8. You can change the DHCP IP setting in the pages and click **Save Settings** after finishing settings.

Internet Settings > **MULTI VLAN SUBNET CONFIG** LOGOUT

This page shows the list of available multiple VLAN subnets.

Save Settings Don't Save Settings

MULTI VLAN SUBNET

Vlan ID: 2

IP Address: 192.168.2.1

Subnet Mask: 255.255.255.0

DHCP

DHCP Mode: DHCP Server

Domain Name: DLink

Starting IP Address: 192.168.2.100

Ending IP Address: 192.168.2.254

Primary DNS Server (Optional):

Secondary DNS Server (Optional):

Lease Time: 24 (Hours)

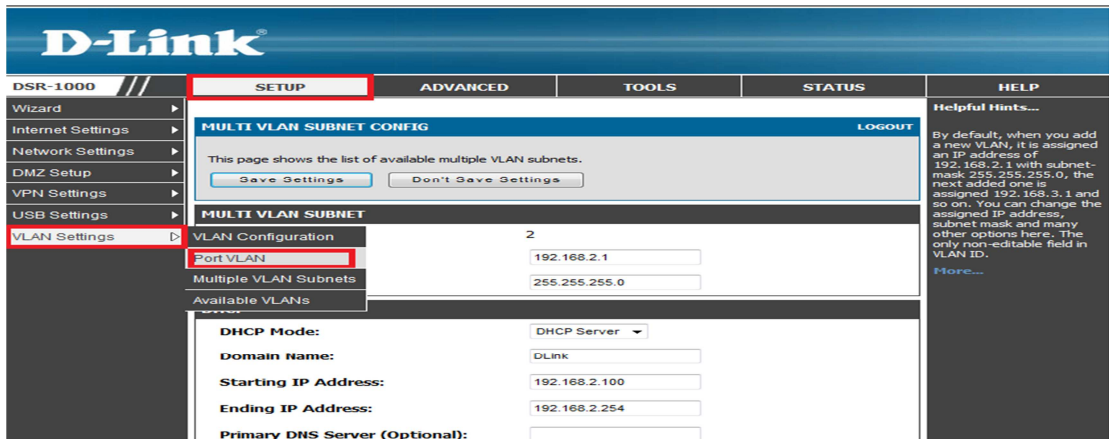
Relay Gateway: 0.0.0.0

LAN Proxy

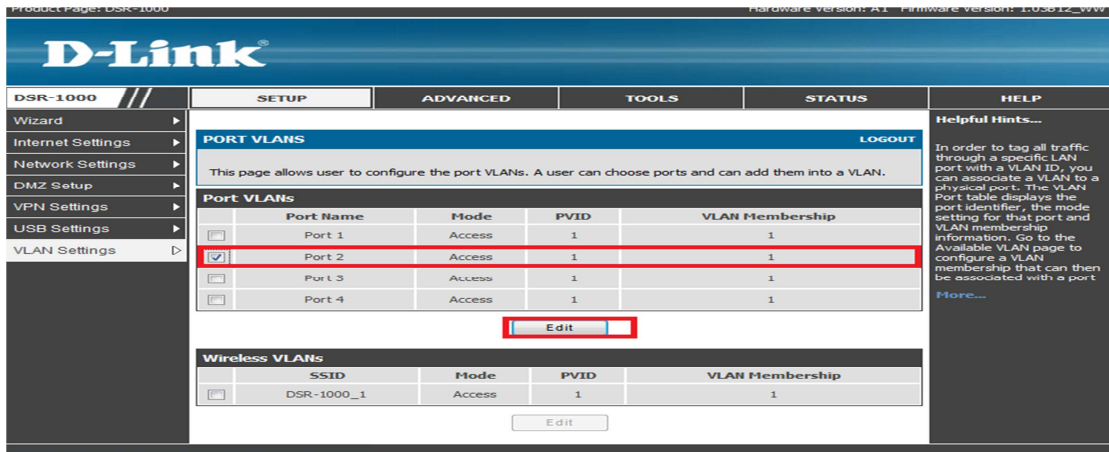
Enable DNS Proxy:

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...

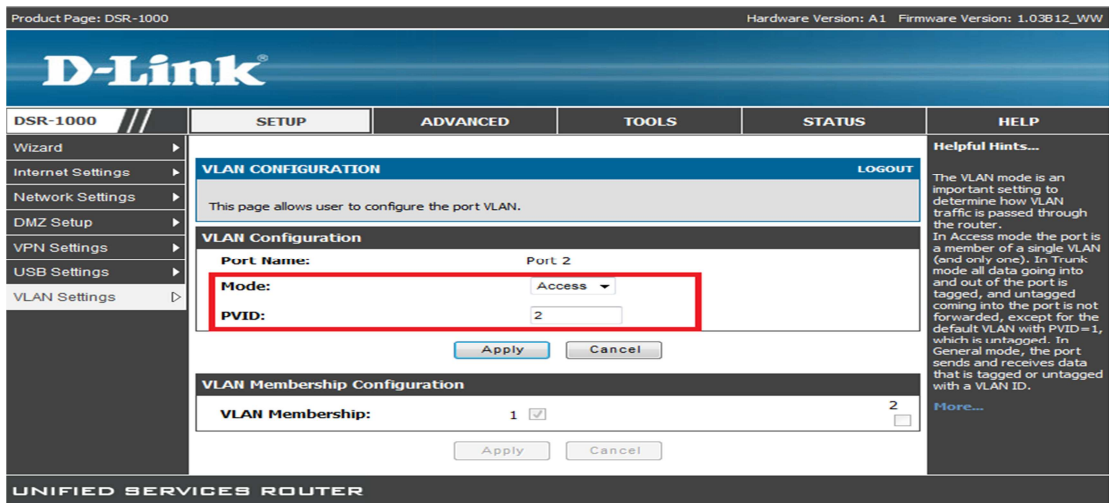
9. Under **SETUP** -> **VLAN Settings**, click **Port VLAN** to specify the vlan to certain port



10. Select the port you want to change the VLAN setting and click the **Edit** like the follows.



11. Modify the PVID field to change the vln and click the **Apply**. In the example, we set up the PVID to 2.



Notes: If you specify the PVID which you didn't create in the step 7, it will pop up the error as follows.

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DSR-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard
Internet Settings
Network Settings
DMZ Setup
VPN Settings
USB Settings
VLAN Settings

VLAN CONFIGURATION LOGOUT

This page allows user to configure the port VLAN.

VLAN Configuration

Port Name: Port 2
Mode: Access
PVID: 3

Apply Cancel

VLAN Membership Configuration

VLAN Membership: 1 2

Apply Cancel

UNIFIED SERVICES ROUTER

Helpful Hints...
The VLAN mode is an important setting to determine how VLAN traffic is passed through the router. In Access mode the port is a member of a single VLAN (and only one). In Trunk mode all data going into and out of the port is tagged, and untagged coming into the port is not forwarded, except for the default VLAN with PVID=1, which is untagged. In general mode, the port sends and receives data that is tagged or untagged with a VLAN ID.
More...

12. After applying the setting, you will see the port2 become PVID 2 and VLAN Membership change to 2 as follows:

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D-Link

DSR-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard
Internet Settings
Network Settings
DMZ Setup
VPN Settings
USB Settings
VLAN Settings

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

Edit

Wireless VLANs

SSID	Mode	PVID	VLAN Membership
<input type="checkbox"/> DSR-1000_1	Access	1	1

Edit

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...

13. Under the SETUP-> Network Settings, click LAN DHCP Leased Clients.

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D-Link

DSR-1000 // SETUP ADVANCED TOOLS STATUS HELP

Wizard
Internet Settings
Network Settings
DMZ Setup
VPN Settings
USB Settings
VLAN Settings

DHCP LEASED CLIENTS LOGOUT

This page shows the list of DHCP clients connected to the LAN DHCP Server and to whom DHCP Server has assigned IP addresses.

IP Address	MAC Address
192.168.1.100	00:1b:24:1e:4f:a8
192.168.2.100	00:16:d3:b5:ba:c4

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Helpful Hints...
If the LAN is serving DHCP addresses, this table will show the list of DHCP clients for the router's LAN DHCP server.
More...

14. You can see the DHCP Lease Client information as follows.



DSR-1000	SETUP	ADVANCED	TOOLS	STATUS	HELP						
Wizard					Helpful Hints... If the LAN is serving DHCP addresses, this table will show the list of DHCP clients for the router's LAN DHCP server. More...						
Internet Settings	DHCP LEASED CLIENTS LOGOUT										
Network Settings	This table displays the list of DHCP clients connected to the LAN DHCP Server and to whom DHCP Server has given leases.										
DMZ Setup	DHCP Leased Clients (LAN)										
VPN Settings	<table border="1"><thead><tr><th>IP Address</th><th>MAC Address</th></tr></thead><tbody><tr><td>192.168.10.100</td><td>00:1b:24:1e:4f:a8</td></tr><tr><td>192.168.2.100</td><td>00:16:d3:b5:ba:c4</td></tr></tbody></table>					IP Address	MAC Address	192.168.10.100	00:1b:24:1e:4f:a8	192.168.2.100	00:16:d3:b5:ba:c4
IP Address	MAC Address										
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USB Settings											
VLAN Settings											
UNIFIED SERVICES ROUTER											