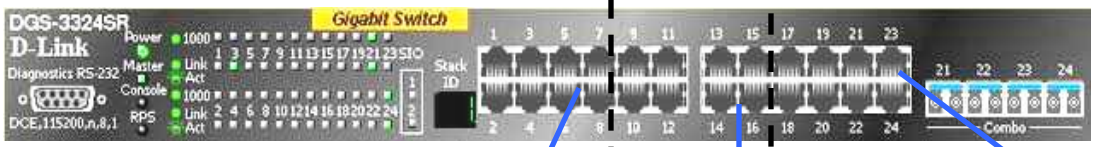
802.1v – Port-and-Protocol-based VLAN

Scenario:

Ports 1-8 is IPv6 protocol-based VLAN. Users at this VLAN are running IPv6 protocol. At this VLAN, only IPv6 packet can pass, and other protocol packets, including IPv4, will be dropped, providing better performance and security. IPv6 users CANNOT communicate other networks.

Protocol-based VLAN



IPv6 VLAN | **Net2** | **Net4**

DGS-3324SR

.254 **.254**

IPv6 protocol VLAN
IPv6 users

IP Protocol
Users
192.168.2.x/24
Gw192.168.2.254

IP Server,
192.168.4.x/24
Gw192.168.4.254

Protocol-based VLAN

At DGS-3324SR

1. Delete ports from default vlan for other vlan use.

config vlan default delete 1:1-1:24

2. Create VLAN, add ports into it, and then create IP interface for the VLAN.

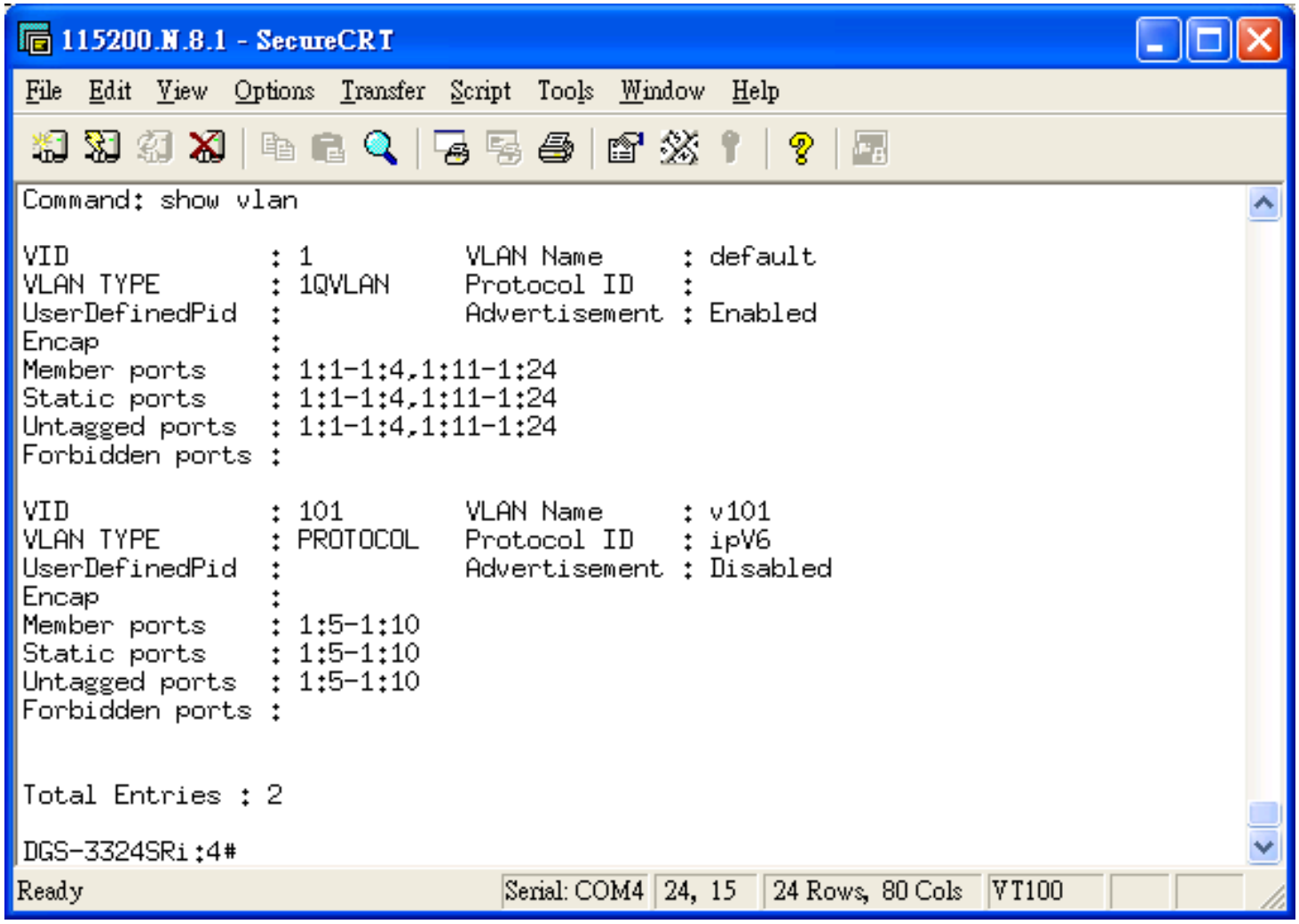
create vlan v101 tag 101 type protocol-ipV6
config vlan v101 add untagged 1-8

create vlan v102 tag 102
config vlan v102 add untagged 9-16
create ipif net2 192.168.2.254/24 v102 state enabled

create vlan v104 tag 104
config vlan v104 add untagged 17-24
create ipif net4 192.168.4.254/24 v104 state enabled

At User's PC

1. For Net2,Net4 IPv4 users, configure IP address, mask, for the associated IP Network. Gateway = DGS-3324SR's Interface IP
2. IPv6 protocol VLAN users uses configure IPv6 configurations.


115200.N.8.1 - SecureCRT
File Edit View Options Transfer Script Tools Window Help
Command: show vlan
VID : 1 VLAN Name : default
VLAN TYPE : 1QVLAN Protocol ID :
UserDefinedPid : Advertisement : Enabled
Encap :
Member ports : 1:1-1:4,1:11-1:24
Static ports : 1:1-1:4,1:11-1:24
Untagged ports : 1:1-1:4,1:11-1:24
Forbidden ports :
VID : 101 VLAN Name : v101
VLAN TYPE : PROTOCOL Protocol ID : ipV6
UserDefinedPid : Advertisement : Disabled
Encap :
Member ports : 1:5-1:10
Static ports : 1:5-1:10
Untagged ports : 1:5-1:10
Forbidden ports :
Total Entries : 2
DGS-3324SRi:4#
Ready
Serial: COM4
24, 15
24 Rows, 80 Cols
VT100