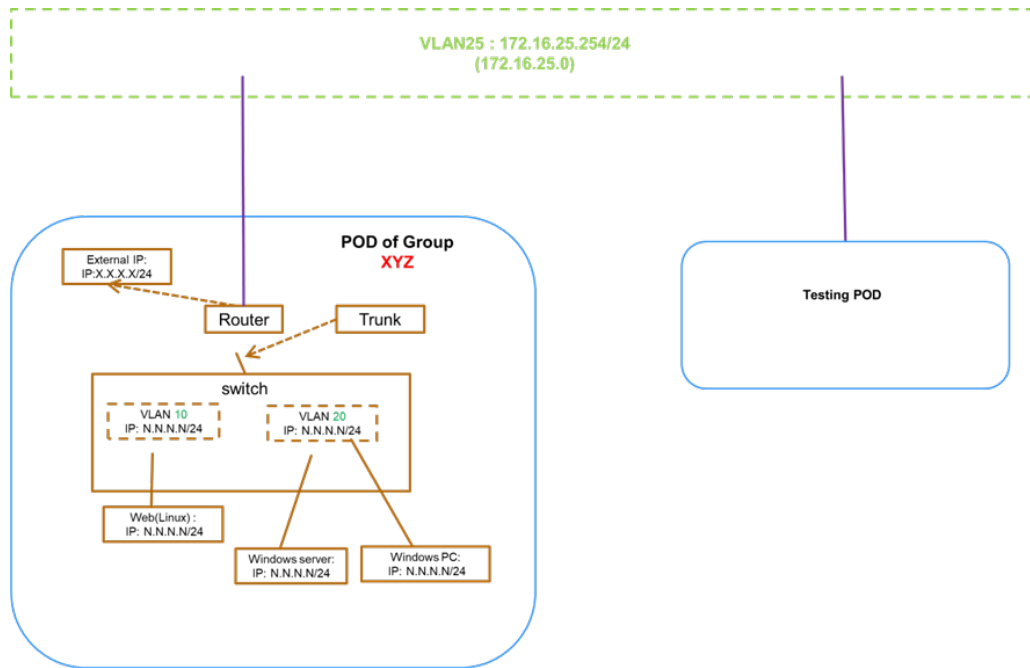# IP Address Allocation (Sem 2, 2025)

In Weeks $9 - 13$, each group will have to create **2 VLANs** during hands-on activities. The two VLANs will be on the same switch as shown below. In Weeks $4 - 7$, you will not have VLAN in your system.

IP addresses for Weeks 9–13 are allocated as below (for Weeks 4–7, please check the next page)

Note: Let `YZ` be the last two digits of the group number (e.g., UG469 $\Rightarrow$ `YZ`=69). Gateways use `.1` of each subnet.

1. For UG (11514) students (Groups 401–468)

UG (11514) Formula Table (use `YZ` = last two digits)

Group No	VLAN 10 Subnet (formula)	VLAN 20 Subnet (formula)	Gateway + External (formula)
UG (`YZ`)	`192.168.( 2*YZ ).0/24`	`192.168.( 2*YZ + 1 ).0/24`	VLAN10 GW: `192.168.( 2*YZ ).1` VLAN20 GW: `192.168.( 2*YZ + 1 ).1` External: `172.16.25.( YZ + 10 )/24`

UG (11514) Examples

Group No	VLAN 10 Subnet	VLAN 20 Subnet	Gateway + External
UG 469 (YZ=69)	192.168.138.0/24	192.168.139.0/24	GW: 192.168.138.1, 192.168.139.1 External: 172.16.25.79/24
UG 470 (YZ=70)	192.168.140.0/24	192.168.141.0/24	GW: 192.168.140.1, 192.168.141.1 External: 172.16.25.80/24

2. For PG (11515) students (Groups 501–520)

PG (11515) Formula Table (use YZ = last two digits)

Group No	VLAN 10 Subnet (formula)	VLAN 20 Subnet (formula)	Gateway + External (formula)
PG (YZ)	192.168.(2*YZ + 200).0/24	192.168.(2*YZ + 201).0/24	VLAN10 GW: 192.168.(2*YZ + 200).1 VLAN20 GW: 192.168.(2*YZ + 201).1 External: 172.16.25.(130 + YZ)/24

PG (11515) Examples

Group No	VLAN 10 Subnet	VLAN 20 Subnet	Gateway + External
PG 521 (YZ=21)	192.168.242.0/24	192.168.243.0/24	GW: 192.168.242.1, 192.168.243.1 External: 172.16.25.151/24
PG 522 (YZ=22)	192.168.244.0/24	192.168.245.0/24	GW: 192.168.244.1, 192.168.245.1 External: 172.16.25.152/24

For Weeks 4–7, you will install, configure, and test the virtual machines on a single PC. All VMs will be within one LAN, and you should assign IP addresses from the VLAN 10 range. This setup will simplify your work in Weeks 9–12, as will become evident later.