

# VLAN SUBNETTING: NETWORK ID, BROADCAST, AND IP VISIBILITY

# LEARNING OBJECTIVES

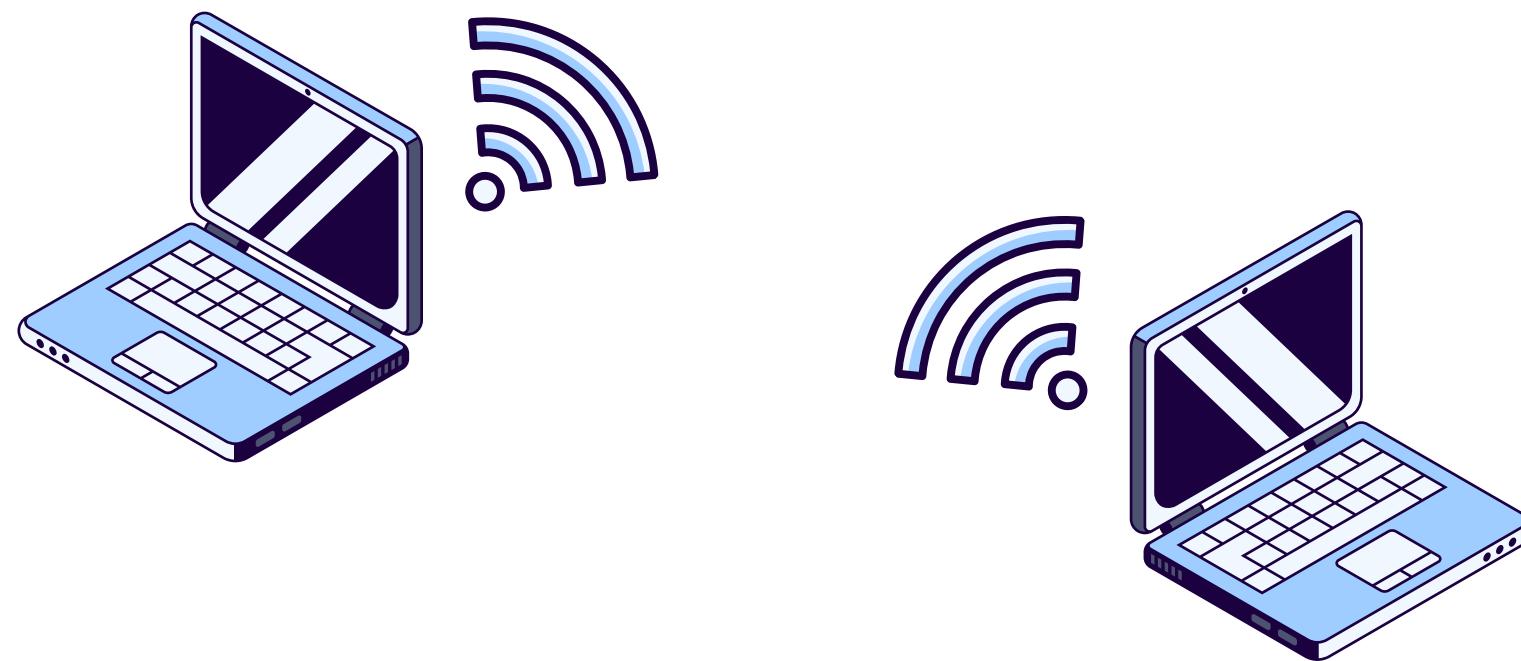
Understand VLAN subnetting concepts

Calculate subnet ranges

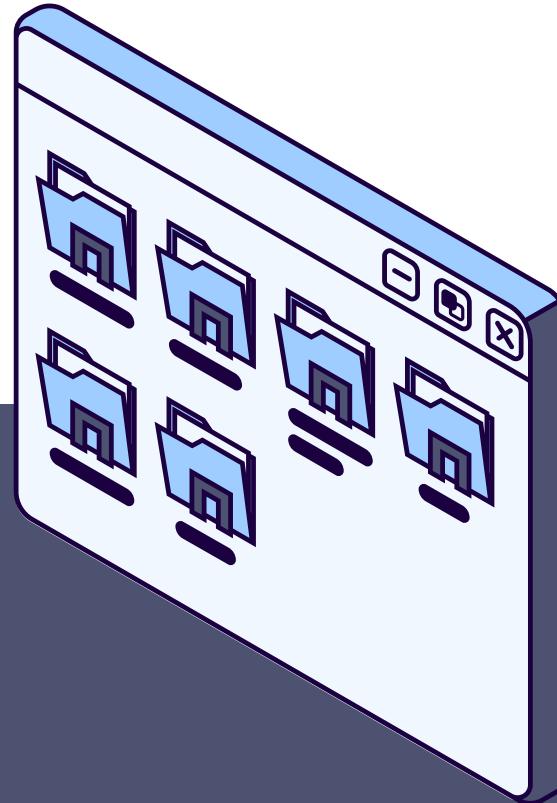
Analyze VLAN communication

# NETWORK ID (NET ID)

- Identifies the network itself.
- Cannot be assigned to any device.
- Example: 192.64.0.0



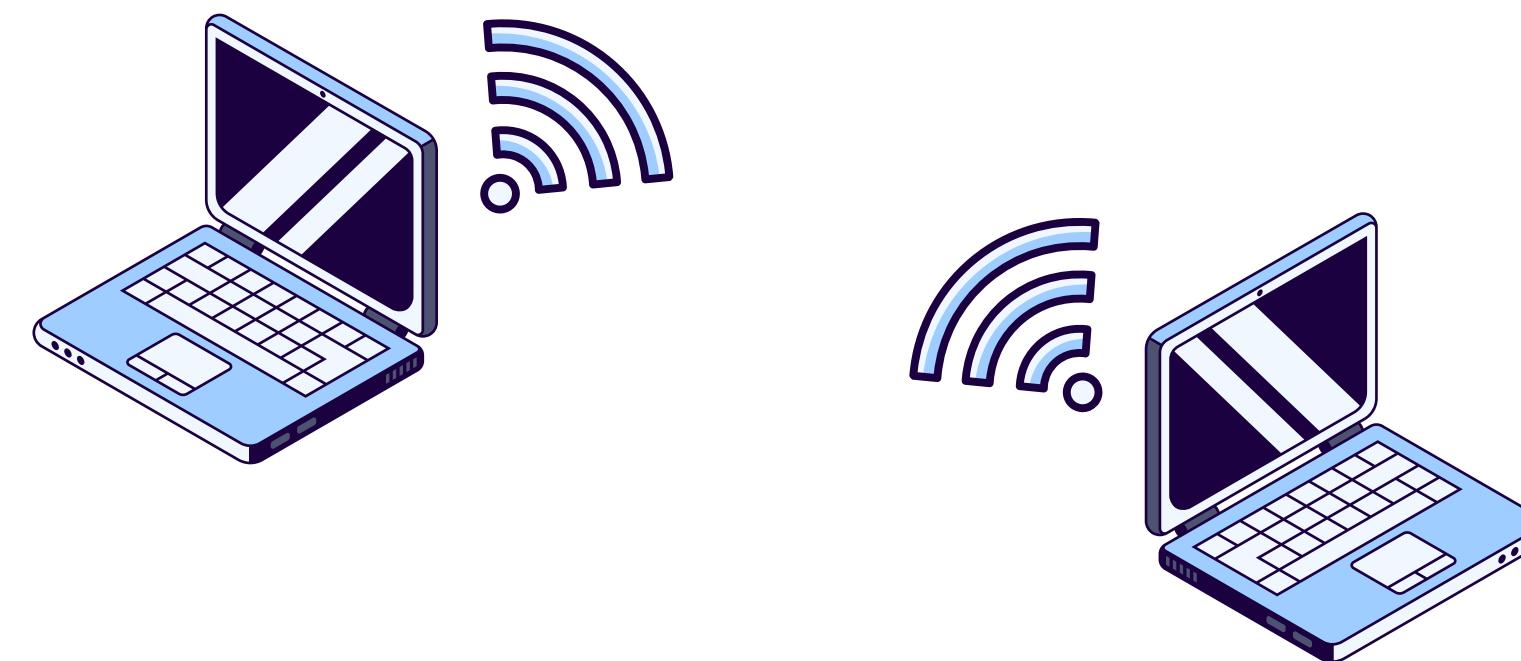
- The first assignable IP in the network.
- Can be used by a host, router, or switch.
- Example: 192.64.0.1



## FIRST IP (FIRST USABLE IP)

# LAST IP (LAST USABLE IP)

- The last assignable IP in the network.
- Used by hosts in the subnet.
- Example: 192.65.255.254



# BROADCAST IP

- Used to send data to all devices in the network.
- Cannot be assigned to any device.
- Example: 192.65.255.255

