



## IP Scheme

### Corporate Network (172.27.0.0/16)

**VLAN 10** (Corporate-Wired): 172.27.10.0/24  
Gateway: 172.27.10.1 (Corporate Firewall Interface)  
Corporate Server: 172.27.10.5  
Corporate PCs: 172.27.10.10 - 172.27.10.17 (2 per switch)  
Available DHCP Pool: 172.27.10.50 - 172.27.10.254  
**VLAN 20** (Corporate-WLAN): 172.27.20.0/24  
Gateway: 172.27.20.1 (Corporate Firewall Interface)  
Available DHCP Pool: 172.27.20.100 - 172.27.20.254  
**VLAN 99** (Management): 172.27.99.0/24  
Gateway: 172.27.99.1 (Corporate Firewall Interface)

SW-01: 172.27.99.2

SW-02: 172.27.99.3

SW-03: 172.27.99.4

SW-04: 172.27.99.5

AP-01: 172.27.99.6

AP-02: 172.27.99.7

AP-03: 172.27.99.8

AP-04: 172.27.99.9

### HotSpot Network (172.28.0.0/16)

**VLAN 30** (HotSpot-WLAN): 172.28.30.0/24  
Gateway: 172.28.30.1 (HotSpot Firewall Interface)  
Available DHCP Pool: 172.28.30.100 - 172.28.30.254

### SSID Config

"CorporateNet" SSID: WPA2-Enterprise encryption, mapped to **VLAN 20**.

"GuestHotSpot" SSID: Open, mapped to **VLAN 30** with captive portal managed by FW-HOTSPOT

## 1. Firewalls

FW-CORP (Corporate Firewall)

0/0: WAN connection to Internet

0/1: Trunk to SW-01 0/21 (Carries VLANs 10, 20, 99)

FW-HOTSPOT (HotSpot Firewall)

0/0: WAN connection to Internet

0/1: Trunk to SW-01 0/20 (Carries VLAN 30)

## 2. Switches

### SW-01

0/1: Trunk to AP-01 (172.27.99.6) (Carries VLANs 20, 30, 99)

0/2: Access Port (VLAN 10) for PC-CORP-01 (172.27.10.10)

0/3: Access Port (VLAN 10) for PC-CORP-02 (172.27.10.11)

0/20: Trunk to FW-HOTSPOT 0/1

0/21: Trunk to FW-CORP 0/1

0/22: Trunk to SW-04 0/14

0/23: Trunk to SW-03 0/15

0/24: Trunk to SW-02 0/16

### SW-02

0/1: Trunk to AP-02 (172.27.99.7) (Carries VLANs 20, 30, 99)

0/2: Access Port (VLAN 10) for PC-CORP-03 (172.27.10.12)

0/3: Access Port (VLAN 10) for PC-CORP-04 (172.27.10.13)

0/4: Access Port (VLAN 10) for SRV-AD-FILE (172.27.10.5)

0/22: Trunk to SW-04 0/14

0/23: Trunk to SW-03 0/15

0/24: Trunk to SW-01 0/16

### SW-03

0/1: Trunk to AP-03 (172.27.99.8) (Carries VLANs 20, 30, 99)

0/2: Access Port (VLAN 10) for PC-CORP-05 (172.27.10.14)

0/3: Access Port (VLAN 10) for PC-CORP-06 (172.27.10.15)

0/22: Trunk to SW-04 0/14

0/23: Trunk to SW-01 0/15

0/24: Trunk to SW-02 0/16

### SW-04

0/1: Trunk to AP-04 (172.27.99.9) (Carries VLANs 20, 30, 99)

0/2: Access Port (VLAN 10) for PC-CORP-07 (172.27.10.16)

0/3: Access Port (VLAN 10) for PC-CORP-08 (172.27.10.17)

0/22: Trunk to SW-01 0/14

0/23: Trunk to SW-03 0/15

0/24: Trunk to SW-02 0/16

## 3. Wireless Access Points

AP-01, AP-02, AP-03, AP-04

AP-01: 0/1 to SW-01 0/1

AP-02: 0/1 to SW-02 0/1

AP-03: 0/1 to SW-03 0/1

AP-04: 0/1 to SW-04 0/1

## 4. Corporate PCs

PC-CORP-01 to PC-CORP-08

PC-CORP-01: Connected to SW-01 0/2

PC-CORP-02: Connected to SW-01 0/3

PC-CORP-03: Connected to SW-02 0/2

PC-CORP-04: Connected to SW-02 0/3

PC-CORP-05: Connected to SW-03 0/2

PC-CORP-06: Connected to SW-03 0/3

PC-CORP-07: Connected to SW-04 0/2

PC-CORP-08: Connected to SW-04 0/3

## 5. Corporate Server

SRV-AD-FILE

0/1: Connected to SW-02 0/4 (Access Port, VLAN 10)