## Hardware Lab Technical Specifications

### Student Group POD’s:

Replace x in name of devices to your group number.

Example: If you are in Group1 your PC will be named G**1**PC1 instead of G**x**PC1

#### Type A POD (Groups 1,3,4,6)

A diagram of a network

Description automatically generated

#### Type B POD (Groups 2 and 5)

A diagram of a computer network

Description automatically generated

### Lab LAN’s Addressing Scheme

|  |  |  |
| --- | --- | --- |
|  | Network ID | Gateway |
| GROUP1 | 10.1.1.0/24 | 10.1.1.1/24 |
| GROUP2 | 10.1.2.0/24 | 10.1.2.1/24 |
| GROUP3 | 10.1.3.0/24 | 10.1.3.1/24 |
| GROUP4 | 10.1.4.0/24 | 10.1.4.1/24 |
| GROUP5 | 10.1.5.0/24 | 10.1.5.1/24 |
| GROUP6 | 10.1.6.0/24 | 10.1.6.1/24 |

### Task 1 – Connect all devices per topology diagram

## Group 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Device Name | Local Port | Interface IP | Host Connected to: | Remote Port: | Default Gateway |
|  |  |  |  |  |  |
| G1R1 | G0/0/1 | 172.16.0.1/24 | DS1 | G0/21 | 172.16.0.200/24 |
|  | G0/0/0 | 10.1.1.1/24 | G1SW1 | Fa0/1 |  |
|  |  |  |  |  |  |
| G1SW1 | Fa0/11 |  | G1PC1 |  |  |
|  | Fa0/12 |  | G1PC2 |  |  |
|  | Fa0/13 |  | G1PC3 |  |  |
|  | Fa0/1 |  | G1R1 | G0/0/0 |  |
|  | Fa0/20 |  | G1SW2 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.1.11/24 |  |  |  |
| G1SW2 | Fa0/14 |  | G1PC4 |  |  |
|  | Fa0/15 |  | G1PC5 |  |  |
|  | Fa0/16 |  | G1PC6 |  |  |
|  | Fa0/20 |  | G1SW1 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.1.12/24 |  |  |  |
|  |  |  |  |  |  |
| G1PC1 | RLT1 | 10.1.1.101/24 | G1SW1 | Fa0/11 | 10.1.1.1/24 |
| G1PC2 | RLT1 | 10.1.1.102/24 | G1SW1 | Fa0/12 | 10.1.1.1/24 |
| G1PC3 | RLT1 | 10.1.1.103/24 | G1SW1 | Fa0/13 | 10.1.1.1/24 |
| G1PC4 | RLT1 | 10.1.1.104/24 | G1SW2 | Fa0/14 | 10.1.1.1/24 |
| G1PC5 | RLT1 | 10.1.1.105/24 | G1SW2 | Fa0/15 | 10.1.1.1/24 |
| G1PC6 | RLT1 | 10.1.1.106/24 | G1SW2 | Fa0/16 | 10.1.1.1/24 |

## Group 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Device Name | Local Port | Interface IP | Host Connected to: | Remote Port: | Default Gateway |
|  |  |  |  |  |  |
| G2R1 | G0/0/1 | 172.16.0.2/24 | DS1 | G0/22 | 172.16.0.200/24 |
|  | G0/0/0 | 10.1.2.1/24 | G2SW1 | G0/24 |  |
|  |  |  |  |  |  |
| G2SW1 | Fa0/11 |  | G2PC1 | Fa0/11 |  |
|  | Fa0/12 |  | G2PC2 | Fa0/12 |  |
|  | Fa0/1 |  | G2R1 | G0/0/0 |  |
|  | Fa0/20 |  | G2SW2 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.2.11/24 |  |  |  |
|  |  |  |  |  |  |
| G2SW2 | Fa0/13 |  | G2PC3 | Fa0/11 |  |
|  | Fa0/14 |  | G2PC4 | Fa0/12 |  |
|  | Fa0/20 |  | G2SW1 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.2.12/24 |  |  |  |
|  |  |  |  |  |  |
| G2PC1 | RLT1 | 10.1.2.101/24 | G2SW1 | Fa0/11 | 10.1.2.1/24 |
| G2PC2 | RLT1 | 10.1.2.102/24 | G2SW1 | Fa0/12 | 10.1.2.1/24 |
| G2PC3 | RLT1 | 10.1.2.103/24 | G2SW1 | Fa0/13 | 10.1.2.1/24 |
| G2PC4 | RLT1 | 10.1.2.104/24 | G2SW2 | Fa0/14 | 10.1.2.1/24 |
| G2PC5 | RLT1 | 10.1.2.105/24 | G2SW2 | Fa0/15 | 10.1.2.1/24 |
| G2PC6 | RLT1 | 10.1.2.106/24 | G2SW2 | Fa0/16 | 10.1.2.1/24 |

## Group 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Device Name | Local Port | Interface IP | Host Connected to: | Remote Port: | Default Gateway |
|  |  |  |  |  |  |
| G3R1 | G0/0/1 | 172.16.0.3/24 | DS1 | G0/23 | 172.16.0.200/24 |
|  | G0/0/0 | 10.1.3.1/24 | G3SW1 | G0/24 |  |
|  |  |  |  |  |  |
| G3SW1 | Fa0/11 |  | G3PC1 |  |  |
|  | Fa0/12 |  | G3PC2 |  |  |
|  | Fa0/13 |  | G3PC3 |  |  |
|  | Fa0/1 |  | G3R1 | G0/0/0 |  |
|  | Fa0/20 |  | G3SW2 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.3.11/24 |  |  |  |
| G3SW2 | Fa0/14 |  | G3PC4 |  |  |
|  | Fa0/15 |  | G3PC5 |  |  |
|  | Fa0/16 |  | G3PC6 |  |  |
|  | Fa0/20 |  | G3SW1 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.3.12/24 |  |  |  |
| G3PC1 | RLT1 | 10.1.3.101/24 | G3SW1 | Fa0/11 | 10.1.3.1/24 |
| G3PC2 | RLT1 | 10.1.3.102/24 | G3SW1 | Fa0/12 | 10.1.3.1/24 |
| G3PC3 | RLT1 | 10.1.3.103/24 | G3SW1 | Fa0/13 | 10.1.3.1/24 |
| G3PC4 | RLT1 | 10.1.3.104/24 | G3SW2 | Fa0/14 | 10.1.3.1/24 |
| G3PC5 | RLT1 | 10.1.3.105/24 | G3SW2 | Fa0/15 | 10.1.3.1/24 |
| G3PC6 | RLT1 | 10.1.3.106/24 | G3SW2 | Fa0/16 | 10.1.3.1/24 |

## Group 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Device Name | Local Port | Interface IP | Host Connected to: | Remote Port: | Default Gateway |
|  |  |  |  |  |  |
| G4R1 | G0/0/1 | 172.16.0.4/24 | DS2 | G0/21 | 172.16.0.200/24 |
|  | G0/0/0 | 10.1.4.1/24 | G4SW1 | G0/24 |  |
|  |  |  |  |  |  |
| G4SW1 | Fa0/11 |  | G4PC1 |  |  |
|  | Fa0/12 |  | G4PC2 |  |  |
|  | Fa0/13 |  | G4PC3 |  |  |
|  | Fa0/1 |  | G4R1 | G0/0/0 |  |
|  | Fa0/20 |  | G4SW2 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.4.11/24 |  |  |  |
| G4SW2 | Fa0/14 |  | G4PC4 |  |  |
|  | Fa0/15 |  | G4PC5 |  |  |
|  | Fa0/16 |  | G4PC6 |  |  |
|  | Fa0/20 |  | G4SW1 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.4.12/24 |  |  |  |
| G4PC1 | RLT1 | 10.1.4.101/24 | G4SW1 | Fa0/11 | 10.1.4.1/24 |
| G4PC2 | RLT1 | 10.1.4.102/24 | G4SW1 | Fa0/12 | 10.1.4.1/24 |
| G4PC3 | RLT1 | 10.1.4.103/24 | G4SW1 | Fa0/13 | 10.1.4.1/24 |
| G4PC4 | RLT1 | 10.1.4.104/24 | G4SW2 | Fa0/14 | 10.1.4.1/24 |
| G4PC5 | RLT1 | 10.1.4.105/24 | G4SW2 | Fa0/15 | 10.1.4.1/24 |
| G4PC6 | RLT1 | 10.1.4.106/24 | G4SW2 | Fa0/16 | 10.1.4.1/24 |

## Group 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Device Name | Local Port | Interface IP | Host Connected to: | Remote Port: | Default Gateway |
|  |  |  |  |  |  |
| G5R1 | G0/0/1 | 172.16.0.5/24 | DS2 | G0/22 | 172.16.0.200/24 |
|  | G0/0/0 | 10.1.5.1/24 | G5SW1 | G0/24 |  |
|  |  |  |  |  |  |
| G5SW1 | Fa0/11 |  | G5PC1 | Fa0/11 |  |
|  | Fa0/12 |  | G5PC2 | Fa0/12 |  |
|  | Fa0/1 |  | G5R1 | G0/0/0 |  |
|  | Fa0/20 |  | G5SW2 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.5.11/24 |  |  |  |
|  |  |  |  |  |  |
| G5SW2 | Fa0/13 |  | G5PC3 | Fa0/11 |  |
|  | Fa0/14 |  | G5PC4 | Fa0/12 |  |
|  | Fa0/20 |  | G5SW1 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.5.12/24 |  |  |  |
|  |  |  |  |  |  |
| G5PC1 | RLT1 | 10.1.5.101/24 | G5SW1 | Fa0/11 | 10.1.5.1/24 |
| G5PC2 | RLT1 | 10.1.5.102/24 | G5SW1 | Fa0/12 | 10.1.5.1/24 |
| G5PC3 | RLT1 | 10.1.5.103/24 | G5SW1 | Fa0/13 | 10.1.5.1/24 |
| G5PC4 | RLT1 | 10.1.5.104/24 | G5SW2 | Fa0/14 | 10.1.5.1/24 |
| G5PC5 | RLT1 | 10.1.5.105/24 | G5SW2 | Fa0/15 | 10.1.5.1/24 |
| G5PC6 | RLT1 | 10.1.5.106/24 | G5SW2 | Fa0/16 | 10.1.5.1/24 |

## Group 6

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Device Name | Local Port | Interface IP | Host Connected to: | Remote Port: | Default Gateway |
|  |  |  |  |  |  |
| G6R1 | G0/0/1 | 172.16.0.6/24 | DS2 | G0/23 | 172.16.0.200/24 |
|  | G0/0/0 | 10.1.6.1/24 | G6SW1 | G0/24 |  |
|  |  |  |  |  |  |
| G6SW1 | Fa0/11 |  | G6PC1 |  |  |
|  | Fa0/12 |  | G6PC2 |  |  |
|  | Fa0/13 |  | G6PC3 |  |  |
|  | Fa0/1 |  | G6R1 | G0/0/0 |  |
|  | Fa0/20 |  | G6SW2 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.6.11/24 |  |  |  |
| G6SW2 | Fa0/14 |  | G6PC4 |  |  |
|  | Fa0/15 |  | G6PC5 |  |  |
|  | Fa0/16 |  | G6PC6 |  |  |
|  | Fa0/20 |  | G6SW1 | Fa0/20 |  |
|  | SVI VLAN 1 | 10.1.6.12/24 |  |  |  |
| G6PC1 | RLT1 | 10.1.6.101/2 | G6SW1 | Fa0/11 | 10.1.6.1/24 |
| G6PC2 | RLT1 | 10.1.6.102/2 | G6SW1 | Fa0/12 | 10.1.6.1/24 |
| G6PC3 | RLT1 | 10.1.6.103/2 | G6SW1 | Fa0/13 | 10.1.6.1/24 |
| G6PC4 | RLT1 | 10.1.6.104/24 | G6SW2 | Fa0/14 | 10.1.6.1/24 |
| G6PC5 | RLT1 | 10.1.6.105/2 | G6SW2 | Fa0/15 | 10.1.6.1/24 |
| G6PC6 | RLT1 | 10.1.6.106/2 | G6SW2 | Fa0/16 | 10.1.6.1/24 |

Device configuration specification:

All devices should be configured according to following specification:

Local Database credentials:

Username: **admin**

Password **admingx - Please change x to match your group number**

SSH server:

SSH server version: **2**

RSA key length: **2048**

Enable Secret: **ciscoenpa**

Line Con 0

Console Password: **ciscoconpa**

**Logging synchronous**

VTY Lines:

**Allow SSH Only**

**Logging synchronous**

Switch Ports:

**Disable all unused ports on switch**

All devices should be accessible via ssh.