

```
## R1_VLAN (SW1_3560)
```

```
...
```

```
hostname R1_VLAN
```

```
vlan 8
```

```
name VerHa
```

```
exit
```

```
vlan 16
```

```
name WLAN
```

```
exit
```

```
vlan 24
```

```
name Myy
```

```
exit
```

```
vlan 48
```

```
name Osto
```

```
exit
```

```
ip routing
```

```
interface vlan 1
```

```
ip address 172.21.1.1 255.255.255.0
```

```
no shutdown
```

```
exit
```

```
interface vlan 8
```

```
ip address 172.21.8.1 255.255.254.0
```

```
no shutdown
```

exit

interface vlan 16

ip address 172.21.16.1 255.255.252.0

no shutdown

exit

interface vlan 24

ip address 172.21.24.1 255.255.248.0

no shutdown

exit

interface vlan 48

ip address 172.21.48.1 255.255.240.0

no shutdown

exit

interface range f0/21-22

channel-group 1 mode active

exit

interface port-channel 1

switchport trunk encapsulation dot1q

switchport mode trunk

switchport trunk allowed vlan 1,8,16,24,48

switchport trunk native vlan 8

exit

interface f0/24

no switchport

ip address 192.168.12.1 255.255.255.240

no shutdown

exit

interface f0/23

switchport mode access

switchport access vlan 1

switchport nonegotiate

exit

interface f0/1

switchport mode access

switchport access vlan 1

switchport nonegotiate

exit

interface range f0/2-3

switchport mode access

switchport access vlan 8

switchport nonegotiate

exit

interface range f0/4-8

switchport mode access

switchport access vlan 16

switchport nonegotiate

exit

interface range f0/9-14

switchport mode access

switchport access vlan 24

switchport nonegotiate

exit

```
interface range f0/15-20
switchport mode access
switchport access vlan 48
switchport nonegotiate
exit
```

```
interface loopback 0
ip address 10.1.1.1 255.255.255.255
exit
```

```
router ospf 4
router-id 11.1.1.1
exit
```

```
router ospf 4
interface f0/24
ip ospf 4 area 0
exit
```

```
router ospf 4
interface loopback 0
ip ospf 4 area 0
exit
```

```
router ospf 4
interface vlan 1
ip ospf 4 area 0
exit
```

```
router ospf 4
```

```
interface vlan 8
ip ospf 4 area 0
exit
```

```
router ospf 4
interface vlan 16
ip ospf 4 area 0
exit
```

```
router ospf 4
interface vlan 24
ip ospf 4 area 0
exit
```

```
router ospf 4
interface vlan 48
ip ospf 4 area 0
exit
```

```
router ospf 4
passive-interface default
no passive-interface f0/24
```

```
...
```

```
## R2_Reuna
```

```
...
```

```
hostname R2_Reuna
```

```
interface loopback 0
```

```
ip address 10.2.2.2 255.255.255.255
```

```
exit
```

```
interface g0/0
```

```
ip address 192.168.12.2 255.255.255.240
```

```
no shutdown
```

```
exit
```

```
interface g0/1
```

```
ip address 192.168.23.2 255.255.255.240
```

```
no shutdown
```

```
exit
```

```
interface g0/2
```

```
ip address 192.168.1.2 255.255.255.252
```

```
no shutdown
```

```
exit
```

```
ip route 0.0.0.0 0.0.0.0 192.168.1.1
```

```
router ospf 4
```

```
router-id 22.1.1.1
```

```
exit
```

```
router ospf 4
```

```
interface g0/0
```

```
ip ospf 4 area 0
```

```
exit
```

```
router ospf 4
```

```
interface g0/1
```

```
ip ospf 4 area 0
```

```
exit
```

```
interface loopback 0
```

```
ip ospf 4 area 0
```

```
exit
```

```
router ospf 4
```

```
passive-interface default
```

```
no passive-interface g0/0
```

```
no passive-interface g0/1
```

```
Default-information originate
```

```
...
```

```
## R3_Eta
```

```
...
```

```
hostname R3_Eta
```

```
interface f0/1
```

```
ip address 192.168.23.3 255.255.255.240
```

```
no shutdown
```

```
exit
```

```
interface loopback 0
```

```
ip address 10.3.3.3 255.255.255.255
```

```
exit
```

```
interface f0/0
```

```
ip address 172.23.0.1 255.255.255.0
```

```
exit
```

```
router ospf 4
```

```
interface f0/1
```

```
ip ospf 4 area 0
```

```
exit
```

```
router ospf 4
```

```
interface f0/0
```

```
ip ospf 4 area 0
```

```
exit
```

```
router ospf 4
```

```
interface loopback 0
```

```
ip ospf 4 area 0
```

```
exit
```

```
router ospf 4
```

```
router-id 13.1.1.1
```

```
exit
```

```
router ospf 4
```

```
passive-interface default
```

```
no passive-interface f0/1
```

```
...
```

```
## ISP
```

```
...
```



```
hostname ISP
```

```
interface loopback 0
```

```
ip address 111.112.113.1 255.255.255.255
```

```
exit
```

```
interface f0/0
```

```
ip address 192.168.1.1 255.255.255.252
```

```
no shutdown
```

```
exit
```

```
ip route 0.0.0.0 0.0.0.0 192.168.1.2
```

```
```
```

```
SW2_3560
```

```
```
```

```
hostname SW2_3560
```

```
vlan 8
```

```
name VerHa
```

```
exit
```

```
vlan 16
```

```
name WLAN
```

```
exit
```

```
vlan 24
```

```
name Myy
```

```
exit
```

vlan 48

name Osto

exit

interface range f0/21-22

channel-group 1 mode active

exit

interface port-channel 1

switchport trunk encapsulation dot1q

switchport mode trunk

switchport trunk allowed vlan 1,8,16,24,48

switchport trunk native vlan 8

exit

interface range f0/23-24

switchport mode access

switchport access vlan 1

switchport nonegotiate

exit

interface f0/1

switchport mode access

switchport access vlan 1

switchport nonegotiate

exit

interface range f0/2-3

switchport mode access

switchport access vlan 8

switchport nonegotiate

exit

interface range f0/4-8

switchport mode access

switchport access vlan 16

switchport nonegotiate

exit

interface range f0/9-14

switchport mode access

switchport access vlan 24

switchport nonegotiate

exit

interface range f0/15-20

switchport mode access

switchport access vlan 48

switchport nonegotiate

exit

interface vlan 8

ip address 172.21.8.21 255.255.254.0

exit

ip default-gateway 172.21.8.1

...

SW3_2960

...

```
hostname SW3_2960
```

```
interface f0/24
```

```
switchport mode trunk
```

```
switchport trunk allowed vlan 1,8,16,24,48
```

```
switchport trunk native vlan 1
```

```
no shutdown
```

```
exit
```

```
interface range f0/1-23
```

```
switchport mode access
```

```
switchport access vlan 1
```

```
switchport nonegotiate
```

```
exit
```

```
interface vlan 1
```

```
ip address 172.23.0.21 255.255.255.0
```

```
no shutdown
```

```
exit
```

```
ip default-gateway 172.23.0.1
```

```
...
```

```
R1
```

```
...
```

```
ip access-list extended ICMP
```

```
deny icmp any 172.21.16.0 0.0.3.255
```

```
permit ip any any
```

```
exit
```

```
interface f0/24
```

```
ip access-group ICMP in
```

```
```
```

```
ISP
```

```
```
```

```
ip http server
```

(enables server no need for more commands. This command does not work in cisco packet tracer)

(On pc)

```
telnet 111.112.113.1 80
```

```
quit
```

```
```
```

```
R2
```

```
```
```

```
access-list 10 permit 172.21.8.0 0.0.1.255
```

```
line vty 0 15
```

```
transport input ssh
```

```
login local
```

```
ip ssh ver 2
```

```
access-class 10 in
```

```
exit
```

```
ip domain-name SSH-1
```

```
crypto key generate rsa general-keys modulus 2048
```

```
username cisco secret cisco
```

...

R3_Eta

...

ip access-list extended Surfing

permit tcp 172.23.0.0 0.0.0.255 any eq 80

permit tcp 172.23.0.0 0.0.0.255 any eq 443

exit

ip access-list extended Browsing

permit tcp any 172.23.0.0 0.0.0.255 established

exit

interface f0/0

ip access-group Surfing in

ip access-group Browsing out

exit

...