

RIPASSO CONFIGURAZIONE

Ogni router può creare al massimo 50 sottointerfacce per ogni interfaccia fisica che ha a disposizione.

Vlan.dat è un file separato dalla startup-config (se faccio il reload cancellando tutte le configurazioni, quello salvato nel file vlan.dat non viene perso)

```
Switch(config)#hostname S1
S1(config)#vlan 10
S1(config-vlan)#name azzurro
S1(config-vlan)#vlan 20
S1(config-vlan)#vlan 30
S1(config-vlan)#vlan 40
S1(config-vlan)#exit
S1(config)#
S1(config)#do show vlan brief
```

VLAN	Name	Status	Ports
1	default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15, Fa0/16 Fa0/17, Fa0/18, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Fa0/24 Gig0/1, Gig0/2
10	azzurro	active	
20	GIALLO	active	
30	VLAN0030	active	
40	VIOLA	active	
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

```
S1(config)#
```

Assegno le Vlan ai link con gli host

```
S1(config)#int f0/1
S1(config-if)#switch
S1(config-if)#switchport mode access
S1(config-if)#swi
S1(config-if)#switchport access vlan 10
S1(config-if)#int f0/3
S1(config-if)#switchport mode access
S1(config-if)#sw
S1(config-if)#switchport access vlan 30
S1(config-if)#int f0/2
S1(config-if)#sw
S1(config-if)#switchport mode access
S1(config-if)#sw
S1(config-if)#switchport acc
S1(config-if)#switchport access vlan 20
S1(config-if)#int f0/4
S1(config-if)#sw
S1(config-if)#switchport mode access
S1(config-if)#switchport mode access
S1(config-if)#swi
S1(config-if)#switchport access vlan 40
S1(config-if)#
```

Imposto il link trunk tra switch e router

```

S1(config)#int g0/1
S1(config-if)#switchport mode trunk
S1(config-if)#switchport nonegio
S1(config-if)#switchport no
S1(config-if)#switchport nonegotiate
S1(config-if)#switchport trunk allowed vlan 1,10,20,30,40
S1(config-if)#

```

Creo le sub-interfacce virtuali del router (prima devo accendere l'interfaccia fisica)

```

Router(config)#hostname R1
R1(config)#int g0/0
R1(config-if)#no shutdown
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0,
changed state to up

R1(config-if)#interface g0/0.10
R1(config-subif)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0.10, changed state to up

R1(config-subif)#encapus
R1(config-subif)#encap
R1(config-subif)#encapsulation dot1q 10

R1(config)#int g0/0.20
R1(config-subif)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0.20, changed state to up

R1(config-subif)#encap
R1(config-subif)#encapsulation do
R1(config-subif)#encapsulation dot1Q 20
R1(config-subif)#ip add 192.168.20.1 255.255.255.0
R1(config-subif)#exit
R1(config)#int g0/0.30
R1(config-subif)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0.30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0.30, changed state to up

R1(config-subif)#en
R1(config-subif)#encapsulation do
R1(config-subif)#encapsulation dot1Q 30
R1(config-subif)#ip add 192.168.30.1 255.255.255.0

```

Ora configuriamo il Multi-Layer:

```
Switch(config)#hostname MLS
MLS(config)#vlan 50
MLS(config-vlan)#vlan 60
MLS(config-vlan)#vlan 70
MLS(config-vlan)#vlan 80
MLS(config-vlan)#exit
MLS(config)#int g1/0/1
MLS(config-if)#switchport mode trunk
MLS(config-if)#switchport trunk allo
MLS(config-if)#switchport trunk allowed vlan 1,50,60,70,80
MLS(config-if)#exit
MLS(config)#ip routing
MLS(config)#

MLS(config)#interface vlan 50
MLS(config-if)#
%LINK-5-CHANGED: Interface Vlan50, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan50, changed state
to up

MLS(config-if)#ip add 192.168.50.1 255.255.255.0
MLS(config-if)#

MLS(config-vlan)#exit
MLS(config)#int g1/0/2
MLS(config-if)#no swit
MLS(config-if)#no switchport
MLS(config-if)#
```