Basic Configuration

Router Config

```
enable
configure terminal
hostname DS R1
enable secret class will not have to configure password
password cisco
login
exit
line vty 0 4
password cisco
login
exit
service password-encryption
banner motd #Unauthorized access is prohibited! Please stay out! #m
interface int_id
description Link to LAN1
ip address ip + subnet mask
clock rate 128000
no shutdown
exit
interface int_id
```

```
description link to lan 1
ipv6 address
no shutdown
clock rate 1280000
exit
```

interface loopback 0
ip address for loopback
exit

ip dhcp excluded-address
ip dhcp pool
network network number
default-router address
dns-server address
domain-name CCNA.com
lease
netbios-name-server

access-list 10 permit ip address subnet exit show access-list

access-list # permit ip address and subnet mask interface

```
ip access-group 1 out network network number mask
```

```
ip address dhcp
```

```
ip dhcrp excluded-address low address [high address]
ip dhcp pool
show interface brief
show ip route
show running-config interface int_id
```

```
show running-config | section line vty
show ip interface brief | include up
show ip interface brief | exclude unassigned
show ip route | begin gateway
show running-config | section dhcp
show ip dhcp binding
show ip dhcp server statistics
ipconfig /release
ipconfig /renew
ip helper-address
```

```
router eigrp 1
eigrp router-id 1.1.1.1
```

```
router ospf ##

network ip address subnet mask area 0

passive-interface int_id

bandwidth 64

or you could put ip ospf cost #####

end

for multuarea ospf

router ospf 10

router-id

network ip subnet area 1

network ip subnet area 0

default-information originate
end
```

copy running-config startup-config

Switch configuration

enable

dir flash:

configure terminal

```
interface vlan ##
ip address
duplex full
speed 100 / or auto
mdix auto
end
no shutdown
ip domain-name cisco.com
crypto key generate rsa
vlan vlan-id
name vlan-name
end
switchport mode access
switchport access vlan vlan_id
mls qos trust cos
switchport voice vlan #
switchport mode trunk
swithport trunk native vlan vlan_id
switchport trunk allowed vlan vlan_list
switchport access vlan
end
vtp mode?
vtp mode server
vtp domain CCNA
vtp password cisco12345
```

vtp mode client

spanning-tree VLAN 1 root primary #####
spanning-tree VLAN 1 root secondary #####
spanning-tree portfast
spanning-tree bpduguard enable
spaning-tree mode rapid-pvst
interface
spanning-tree link-type point-to-point
end

channel-group 1 mode active

standby version 2
standby [group-number] ip address
standby [group-number] priority [priority-value]
standby [group-number] preempt

copy running-config startup-config
show interfaces int_id
show startup-config
show running-config
show flash
show version

show history

show ip interfaceid

show mac-address-table

show version

show ip ssh

show port-security interface _id

show run | begin ID

show port-security address

no switchport access vlan

no vlan id

delete flash:vlan.dat

no switchport trunk allowed vlan

no switchport trunk native vlan

show interfaces

show spanning-tree active

show ip protocols

show ip ospf

show ip ospf interface