

lab 2

↳ msosá startup-config → router> enable
router# erase startup-config
<Enter>
router# reload
<no>
<Enter>
<no>
waiting for boot

↳ msosá interface áíí → router(config) # interface FastEthernet 0/0/0
router(config-if)#

↳ msosá hostname → router(config)# hostname [name]
[name](config)#

↳ áíí console password → router(config)# line console 0
↳ áíí áíí config router(config-line)# password [pass]
router(config-line)# login
router(config-line)# exit

↳ msosá áíí telnet → router(config)# line vty [start] [end]
router(config-line)# password [pass]
router(config-line)# login
router(config-line)# exit

↳ áíí privileged execute mode → router(config)# enable password [pass]
↳ msosá router# áíí
router(config)# enable secret [pass]

↳ basic configuration for router → router(config)# interface [int] [port]
router(config-if)# ip address [ip] [subnet]
router(config-if)# clockrate 56000 # msosá router-router
router(config-if)# no sh áíí DTE, DCE

↳ áíí loopback interface → router(config)# interface loopback [number]
router(config-if)# ip address [ip] [sub]

↳ static route → standard → router(config)# ip address [ip] [sub] [outgoing int, next h]
→ default → router(config)# ip address 0.0.0.0 0.0.0.0 [outgoing int, next hop]
→ CIDR route summarization → ip áíí áíí áíí áíí áíí 192.168.0.0/28
→ áíí standard route
→ floating → router(config)# ip address [ip] [sub] [outgoing, next h] [number]

↳ rip version 1: → router(config)# router rip
version 2 → router(config-router)# network [network] ! work with only c f

↳ passive-interface → router(config-router)# passive-interface [int] [port]

↳ redistribute protocol → default → router(config-router)# default-information originate
→ other protocol → router(config-router)# redistribute

static
connected
eigrp
metric
ospf
rip

↳ no auto-summary → router(config-router)# no auto-summary ! in router

↳ access-list → sta 1-99 → router(config)# access-list [1-99] [permit/deny] [source] [wc]
→ ext 100-199 → router(config)# access-list [100-199] [permit/deny] [protocol]
[source] [wc] [dest] [wc] eq [protocol/port]

→ router(config-if)# ip access-group [num] [in/out]

↳ ospf → config → router(config)# router ospf [process-id]

router(config-router)# router-id [id]

router(config-router)# network [ip] [wc] area [area]

auto-cost reference bandwidth [100, 1000, ...]

router(config-if)# bandwidth [bw in kbps]

router(config-if)# ip ospf cost [cost]

show ip ospf [neighbor, database]

show ip ospf interface [int] [port]

cost = $\frac{\text{ref bw}(100\text{M})}{\text{bw bps}}$
10G → 100000M
Gi = 1000M
Fast = 100M
Eth = 10M
Serial = 1.544M
128k
64k

→ dhcp → router(config) #



router(config)# ip dhcp excluded-address [start ip] [end ip]

router(config)# ip dhcp pool [pool-name]

router(dhcp-config)# network [ip] [sub]

default-router [ip gateway]

dns-server [ip]

domain-name [~.~]

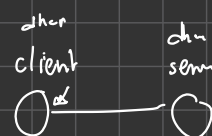
router(config)# no service dhcp

router(config)# int [ip] [port]

router(config-if)# ip helper-address [dhcp server]

router(config)# interface [ip] [p]

router(config-if)# ip address dhcp



switch(config)# int [int] [port]

switch(config-if)# switchport mode access

switchport port-security

switchport port-security mac-address [mac]
[sticky]

maximum [max]

switchport port-security violation [protect]
restrict
shutdown

→ still verify again

sw(config)# ip default-gateway [gateway]

sw(config)# int vlan [vlan]
(config-if)# ip addr [ip] [sub]
no sh

co

router(config)# vlan [vlan]

router(config)# name [vlan]

router(config)# int <range> [int] [port - <port>]

router(config-if)# switchport mode access

router(config-if)# switchport access vlan [vlan]

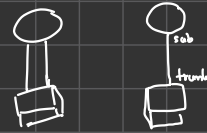
switchport mode trunk

switchport trunk native [vlan]

switchport trunk allowed vlan
[vlan, ...]

show vlan

intervalan → gido girdingz aqss an sub int



```
router(config)# int [int] [port]
no shutdown
```

```
router(config-if)# int [int] [port]. [sub int]
router(config-if)# encapsulation dot1q [vlan]
_____ ip address [ip] [subnet] & vlan gateway
```

```
router(config)# vtp version 2
```

```
vtp domain [name]
```

```
vtp password [password]
```

```
vtp mode [server  
client  
trans]
```

```
vtp pruning ? enable vtp
```

```
int [int] [sub]
```

```
switchport trunk pruning vlan remove  
[vlan]
```

```
router(config)# ip nat inside source static [pri] [pub]
```

```
router(config)# int [int] [port]
```

```
router(config-if)# ip nat [inside, outside] girds a interface
```

```
router(config)# ip nat pool [name] [start-ip] [end-ip] netmask [mask]
```

```
access-list [num] permit [source ip] [wild card]
```

```
ip nat inside source list [num] pool [name] <over load>
```

```
? set nat inside out side
```

```
router(config)#access-list [num] permit [source] [wc]  
ip nat inside source list [num] int [type] [port]  
                                (num)  
ip nat inside outside.
```

```
router(config)#eigrp [AD]  
router(config-router)#eigrp router-id (ip)  
router(config-router)#network [network] [wc]
```

```
router(config-if)#bandwidth [bw kbps]
```

```
show ip eigrp neighbor  
ip eigrp topology
```