

### [Router] Basic Configuration

Short Command	Full-Length Command
<code>ho R1</code>	<code>hostname R1</code>
<code>no ip dom lo</code>	<code>no ip domain -lookup</code>
<code>ena sec class</code>	<code>enable secret class</code>
<code>ser pass</code>	<code>service password-encryption</code>
<code>banner motd #Authorized access ONLY!#</code>	<code>banner motd #[Text]#</code>
<code>login blo 120 a 3 w 30</code>	<code>login block-for 120 attempts 3 within 30</code>
<code>lin con 0</code>	<code>line console 0</code>
<code>pass cisco</code>	<code>password cisco</code>
<code>login</code>	<code>login</code>
<code>logg sync</code>	<code>logging synchr onous</code>
<code>exec-t 5 0</code>	<code>exec-t imeout 5 0</code>
<code>lin vty 0 15</code>	<code>line vty 0 15</code>
<code>pass cisco</code>	<code>password cisco</code>
<code>login</code>	<code>login</code>
<code>logg sync</code>	<code>logging synchr onous</code>
<code>exec-t 5 0</code>	<code>exec-t imeout 5 0</code>
<code>int g0/0</code>	<code>interface [inter face]</code>
<code>desc Connected to G0/0 on R2</code>	<code>descri ption [text]</code>
<code>ip add 10.1.1.1 255.255.255.0</code>	<code>ip address [address] [subnet-mask]</code>
<code>no shut</code>	<code>no shutdown</code>
<code>exit</code>	<code>exit</code>

### [Switch] Basic Configuration

Short Command	Full-Length Command
<code>ho S1</code>	<code>hostname S1</code>
<code>no ip dom lo</code>	<code>no ip domain -lookup</code>
<code>ena sec class</code>	<code>enable secret class</code>
<code>service password-e</code>	<code>service password-encryption</code>
<code>lin con 0</code>	<code>line console 0</code>
<code>pass cisco</code>	<code>password cisco</code>
<code>login</code>	<code>login</code>
<code>logg sync</code>	<code>logging synchr onous</code>



### [Switch] Basic Configuration (cont)

<code>exec-t 5 0</code>	<code>exec-t imeout 5 0</code>
<code>lin vty 0 15</code>	<code>line vty 0 15</code>
<code>pass cisco</code>	<code>password cisco</code>
<code>login</code>	<code>login</code>
<code>logg sync</code>	<code>logging synchr onous</code>
<code>exec-t 5 0</code>	<code>exec-t imeout 5 0</code>
<code>exit</code>	<code>exit</code>

### [Switch] VLAN Configuration

Short Command	Full-Length Command
<code>int vl 10</code>	<code>interface vlan [vlan-number]</code>
<code>na Students</code>	<code>name [vlan- name]</code>
<code>exit</code>	<code>exit</code>
<code>int f0/5</code>	<code>interface [inter face]</code>
<code>sw m a</code>	<code>switchport mode access</code>
<code>sw a v 10</code>	<code>switchport access vlan [vlan-number]</code>
<code>exit</code>	<code>exit</code>

### [Switch] Port Security

Short Command	Full-Length Command
<code>sw port</code>	<code>switchport port-security</code>
<code>sw port max 2</code>	<code>switchport port-security maximum 2</code>
<code>sw port mac st</code>	<code>switchport port-security mac-address sticky</code>
<code>sw port v shut</code>	<code>switchport port-s ecurity violation [mode]</code>

\* Only on access ports, not trunking ports!

### [Switch] VLAN Trunking

Short Command	Full-Length Command
<code>int f0/5</code>	<code>interface [inter face]</code>
<code>sw m t</code>	<code>switchport mode trunking</code>
<code>sw t n v 30</code>	<code>switchport trunking native vlan 30</code>
<code>sw t a v 10,20,30</code>	<code>switchport trunking access vlan 10,20,30</code>
<code>sw non</code>	<code>switchport nonego tiate</code>



### [Router/Switch] SSH Configuration

Short Command	Full-Length Command
<code>usern admin sec cisco</code>	<code>username [name] secret [password]</code>
<code>ip dom n ccna-labs.com</code>	<code>ip domain-name [domain]</code>
<code>cry key gen rsa gen mod 1024</code>	<code>crypto key generate rsa general-keys modulus 1024</code>
<code>ip ssh v 2</code>	<code>ip ssh version 2</code>
<code>lin vty 0 15</code>	<code>line vty 0 15</code>
<code>login lo</code>	<code>login local</code>
<code>trans in ssh</code>	<code>transport input ssh</code>

### Router-On-A-Stick Configuration

Short Command	Full-Length Command
<code>int g0/0.10</code>	<code>interface [subin ter face]</code>
<code>enc dot 10</code>	<code>encapsulation dot1Q [vlan-number]</code>
<code>desc Gateway for Students VLAN</code>	<code>descri ption [text]</code>
<code>ip add 10.1.2.1 255.255.255.0</code>	<code>ip address [address] [subnet-mask]</code>
<code>int g0/0.20</code>	<code>interface [subin ter face]</code>
<code>enc dot 20</code>	<code>encapsulation dot1Q [vlan-number]</code>
<code>desc Gateway for Faculty VLAN</code>	<code>descri ption [text]</code>
<code>ip add 10.1.3.1 255.255.255.0</code>	<code>ip address [address] [subnet-mask]</code>
<code>exit</code>	<code>exit</code>
<code>int g0/0</code>	<code>interface [inter face]</code>
<code>no shut</code>	<code>no shutdown</code>
<code>exit</code>	<code>exit</code>

### RIP Configuration

Short Command	Full-Length Command
<code>ip route 0.0.0.0 0.0.0.0 s0/0/0</code>	<code>ip route 0.0.0.0 0.0.0.0 [exit-interface]</code>
<code>router rip</code>	<code>router rip</code>
<code>ver 2</code>	<code>version 2</code>
<code>no auto</code>	<code>no auto-s ummary</code>
<code>net 192.16 8.1.0</code>	<code>network [netwo rk- add ress]</code>
<code>pa g0/0</code>	<code>passiv e-i nte rface [inter face]</code>
<code>* def o</code>	<code>defaul t-i nfo rmation originate</code>



### RIP Configuration (cont)

*\* Only on router connected to internet*

```
exit                               exit
```

### DHCP Configuration

#### Short Command

#### Full-Length Command

--- DHCP Server---

```
ip dhcp ex 192.168.1.1 192.168.1.5      ip dhcp excluded-address [first-IP] [last-IP]
ip dhcp pool R1_Pool                    ip dhcp pool [pool- name]
netw 192.16 8.1.0 255.25 5.255.0        network [network-address] [subnet-mask]
def 192.16 8.1.1                         default t-r outer [defau lt- gat ewa y-IP]
exit                                     exit
```

--- Relay Router---

```
int g0/0                                interface [inter face]
ip dhcp help [serve r-IP]              ip dhcp helper -ad dress [serve r-IP]
exit                                    exit
```

### NAT Configuration

#### Short Command

#### Full-Length Command

```
acc s 10 p 192.16 8.1.0                 access-list standard [acl-number] permit [address]
ip nat pool CorpNet 209.165.200.10      ip nat pool [pool-name] [first-IP] [last-IP] network [subnet-mask]
209.165.200.13 net 255.255.255.0
ip nat in s list 10 pool CorpNet ov     ip nat inside source list [acl-number] pool [pool-name] overload
no auto                                  no auto-s ummary
pass g0/0                                passiv e-i nte rface g0/0

int g0/0                                interface [inter face]
ip nat in                                ip nat inside
int s0/0/0                               interface [inter face]
ip nat out                                ip nat outside
exit                                     exit
```

