[Router] Basic Configuration

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

[Switch] Basic Configuration

Short Command	Full-Length Command
ho S1	hostname S1
no ip dom lo	no ip domain-lookup
ena sec class	enable secret class
service password-e	service password-encryption
lin con 0	line console 0
pass cisco	password cisco
login	login
logg sync	logging synchronous
exec-t 5 0	exec-timeout 5 0
lin vty 0 15	line vty 0 15
pass cisco	password cisco
login	login
logg sync	logging synchronous
exec-t 5 0	exec-timeout 5 0
exit	exit

[Switch] VLAN Configuration

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

[Switch] Port Security

Short Command	Full-Length Command
sw port	switchport port-security
sw port max 2	switchport port-security maximum 2
sw port mac st	switchport port-security mac-address sticky
sw port v shut	switchport port-security violation *[mode]*

* Only on access ports, not trunking ports!

[Switch] VLAN Trunking

Short Command	Full-Length Command
int f0/5	interface *[interface]*
sw m t	switchport mode trunking
sw t n v 30	switchport trunking native vlan 30
sw t a v 10,20,30	switchport trunking access vlan 10,20,30
sw non	switchport nonegotiate

[Router/Switch] SSH Configuration

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

Router-On-A-Stick Configuration

Short Command	Full-Length Command
`int` g0/0.10	`interface` *[subinterface]*
`enc dot` 10	`encapsulation dot1Q` *[vlan-number]*
`desc` Gateway for Students VLAN	`description` *[text]*
`ip add` 10.1.2.1 255.255.255.0	`ip address` *[address] [subnet-mask]*
`int` g0/0.20	`interface` *[subinterface]*
`enc dot` 20	`encapsulation dot1Q` *[vlan-number]*
`desc` Gateway for Faculty VLAN	`description` *[text]*
`ip add` 10.1.3.1 255.255.255.0	`ip address` *[address] [subnet-mask]*
`exit`	`exit`
`int` g0/0	`interface` *[interface]*
`no shut`	`no shutdown`
`exit`	`exit`

RIP Configuration

Short Command	Full-Length Command
`ip route 0.0.0.0 0.0.0.0` s0/0/0	`ip route 0.0.0.0 0.0.0.0` *[exit-interface]*
`router rip`	`router rip`
`ver 2`	`version 2`
`no auto`	`no auto-summary`
`net` 192.168.1.0	`network` *[network-address]*
`pa` g0/0	`passive-interface` *[interface]*
*`def o`	`default-information originate`
*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 192.168.1.0 255.255.255.0	network *[network-address] [subnet-mask]*
def 192.168.1.1	default-router *[default-gateway-IP]*
exit	exit
--- Relay Router ---	
int g0/0	interface *[interface]*
ip dhcp help *[server-IP]*	ip dhcp helper-address *[server-IP]*
exit	exit

NAT Configuration

Short Command	Full-Length Command
acc s 10 **p** 192.168.1.0	access-list standard *[acl-number]* permit *[address]*
ip nat pool CorpNet 209.165.200.10 209.165.200.13 **net** 255.255.255.0	ip nat pool *[pool-name] [first-IP] [last-IP]* network *[subnet-mask]*
ip nat in s list 10 **pool** CorpNet **ov**	ip nat inside source list *[acl-number]* pool *[pool-name]* overload
no auto	no auto-summary
pass g0/0	passive-interface g0/0
int g0/0	interface *[interface]*
ip nat in	ip nat inside
int s0/0/0	interface *[interface]*
ip nat out	ip nat outside
exit	exit