

### General Configurations

Command	Mode	Function
<code>terminal history size 200</code>	priv. EXEC	changes how many commands the history buffer stores ( <i>for this session only</i> )

### Dynamic Routing Protocol Configuration

Command	Mode	Function
<code>router [protocol]</code>	global	enables protocol & enters router config mode
<code>auto-summary</code>	router	enables automatic network # summarization
<code>default-information originate</code>	router	advertises default route info
<code>network [ip-address]</code>	router	enables dynamic routing for the network ( <i>Directly connected nets only!</i> )
<code>network [ip-address] area 0</code>	router	assigns network to area 0
<code>passive-interface g0/1</code>	router	disables routing updates on that interface
<code>version [version]</code>	router	sets protocol version

### DHCP Configuration

Command	Mode
<code>ip dhcp excluded-address [first IP] [last ip]</code>	global
<code>ip dhcp pool R1G1</code>	global
<code>network [network IP] [subnet mask]</code>	(dhcp-config)
<code>default-router [gateway IP]</code>	(dhcp-config)
<code>dns-server [dns IP]</code>	(dhcp-config)
<code>domain-name ccna-lab.com</code>	(dhcp-config)
<code>lease 2</code>	(dhcp-config)
<code>ip dhcp helper-address [dhcp server IP]</code>	interface ( <i>on relay router</i> )

### NAT Configuration

Short Command	Full Command	What It Does
<code>ip nat pool name [first IP] [last IP]</code>	<code>ip nat pool name [first IP] [last IP]</code>	defines the pool of public addresses to use
<code>net [subnet mask]</code>	<code>netmask [subnet mask]</code>	

### NAT Configuration (cont)

<code>ip nat in s l 10 pool name ov</code>	<code>ip nat inside sour [acl#] pool name o</code>
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<code>ip nat in</code>	<code>ip nat inside</code>
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<code>ip nat out</code>	<code>ip nat outside</code>
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<code>ip nat in s st 192.168.1.10 209.165.200.18</code>	<code>ip nat inside sour [private IP] [glob</code>
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#### ---- Show Commands ----

<code>sh ip nat s</code>	<code>show ip nat statis</code>
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<code>sh ip nat t</code>	<code>show ip nat transl</code>
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### Trunking & Subinterfaces

#### Command

`encapsulation dot1Q`

### Routing Table

#### Command

`interface loopback 0`

`ip route [network] [subnet] [exit-int|next-hop]`

`ipv6 route [network/prefix] [exit-int|next-hop]`

`ip route 0.0.0.0 0.0.0.0 [exit-int]`

`ipv6 route ::/0 [exit-int]`

`ip route 0.0.0.0 0.0.0.0 [next-hop] [AD]`

`ipv6 route ::/0 [next-hop] [AD]`



### New Show Commands

Short Command	What It Displays
<code>sh run int g0/0</code>	running config for specified interface
<code>sh run   [begin include exclude section] line vty</code>	filtered running-config output
<code>sh history</code>	contents of history buffer (previously entered commands)
<code>sh ip protocols</code>	dynamic routing protocol settings

### Refresher Commands: General

Short Command	Complete Command	Mode
<code>no ip dom lo</code>	<code>no ip domain-lookup</code>	global
<code>login blo 120 a 3 w 60</code>	<code>login block-for 120 attempts 3 within 60</code>	global
<code>security pass min 8</code>	<code>security password min-length 8</code>	global
<code>exec-timeout 10</code>	<code>exec-timeout 10</code>	line

### Refresher Commands: Enabling SSH

Short Command	Complete Command	Mode
<code>ip dom n CCNA-lab.com</code>	<code>ip domain-name CCNA-labs.com</code>	global
<code>cry key gen rsa gen mod 1024</code>	<code>crypto key generate rsa general-keys modulus 1024</code>	global
<code>user Bob sec cisco</code>	<code>username Bob secret cisco</code>	global
<code>login lo</code>	<code>login local</code>	line
<code>trans in ssh</code>	<code>transport input ssh</code>	line
<code>ip ssh v 2</code>	<code>ip ssh version 2</code>	global

