CCNA Command Summary Cheat Sheet

Basic Router Commands	
To get into Privilege Mode from User mode	**enable**
To exit out of Privilege mode	**disable**
To exit the router	**Exit or logoff**
Previous Command	**Up arrow or Ctrl-P**
Next Command	**Down arrow or Ctrl-N**
Move forward one character	**Right arrow or Ctrl-F**
Move back one character	**Left arrow or Ctrl-B**
Break Key or Cancel	**<ctrl>"c"**
Auto Complete the command	**<tab>**
Setting Passwords	
Set Password for Console Port	**line console 0** **login** **password *password***
Set Password for Telnet	**line vty 0 4** **login** **password *password***
Set Password for Privilege (Enabled) mode	**enable password *password***
Set Encrypted password for Privilege mode	**enable password *password***
Router Configuration Commands	
To go from Privilege mode to Global Configuration mode	**configure terminal**
To copy the running-configuration to the start-up configuration	**copy run start**

To copy the startup-config to the running-config	**copy start run**
To copy the startup-config to a TFTP server	**copy start tftp**
To copy the running-config to a TFTP server	**copy run tftp**
Save a backup of the IOS to a TFTP server	**copy flash tftp**
Upgrade the IOS from a TFTP server	**copy tftp flash**
Tell the router which IOS in flash to boot from	**boot system flash {filename}**
Tell the Router which IOS to request from a TFTP server (usually a fallback option)	**boot system tftp {filename}**
Viewing the Router's Information	
IOS Version info	**show version**
Current config stored in RAM	**show running-config**
Configuration stored in NVRAM	**show startup-config**
To see IOS info stored in flash	**show flash**
To see information on the interfaces	**show interfaces**
To see a summary of the interfaces	**show ip int brief**
To see processor utilization	**show processes cpu**
Configuring an Interface	
To access an interface	"From Global config" **interface {type} {number}** example : interface Ethernet 0
To set Clock rate on a serial interface	**Clock rate {kbps}** Example : clock rate 64000
Enable the interface	**no shutdown**
Disable the interface	**shutdown**
Assign an IP address to an Interface	**ip address {Ip address} {subnet mask}** Example: ip address 10.1.1.1 255.255.255.0
Configuring TCP/IP	
To enable IP routing on a Router	"From Global config" **ip routing**
To disable IP routing on a Router	"From Global config" **no ip routing**

Displays values about routing timers, networks, and routing information.	**show ip protocols**
Displays contents of the routing table.	**show ip route**
Assign an IP address to an Interface	**ip address {Ip address} {subnet mask}** Example: ip address 10.1.1.1 255.255.255.0
Manually setups up a host table mapping a hostname to an ip address.	**ip host** *name " ip" "addresss"*
Displays the host table	**show hosts**
Configure RIP	**router rip** **network** *"network address"*
Configure IGRP	**Router rip** **Network** *"network address"*
Displays RIP updates	**debug ip rip**
Displays IGRP transactions	**debug ip igrp transactions**
Displays IGRP summary transactions	**Debug ip igrp events**
Displays status and global parameters associated with an interface	**show ip interfaces**
Allows remote management of a device	**telnet** *"ip address of host"*
Uses ICMP to verify hardware connection and logical address of the network layer	**ping** *"network address"*
To setup a static route	**ip route** *"network" "mask" "next hop address"*
IPX configuration	
Enable IPX on a router	**ipx routing**
To enable load balancing	**ipx maximum-paths** *"number"*
To assign a IPX network address to an interface	**ipx network** *"network number"*
To set the encapsulation type on an interface	**encap novell-ether** **encap sap** **encap arpa** **encap snap**
To view the IPX routing table	**show ipx route**
To view an IPX address on an interface	**show ipx interface**
To view the sap table	**show ipx servers**
To view IPX traffic statistics	**show ipx traffic**
To view the IPX rip updates	**debug ipx routing activity**
To view the SAP packets coming and going	**debug ipx sap**
Cisco Discovery Protocol	
See info on directly connected neighbors Add "detail" to the end for more info	**show cdp neighbors**
To see what interfaces are runnning CDP	**show cdp interface**
To specify and particular neighbor and see CDP information	**show cdp entry** *"hostname"*

To turn off CDP for the entire router	**no cdp run**
To turn off CDP for an interface	**No cdp enable**
To change how often the router sends CDP updates	**cdp timer** *"seconds"*
To change how long the router will wait before it's removes a CDP neighber from it's table	**cdp holdtime** *"seconds"*

Access-Lists	
IP Standard Access Lists 1-99 Set parameters for this access list test statement	**access-list** *access-list-number,* **permit |den***y, source, [source-mask]*
Enable an interface to become part of a group that uses the specified access list.	**protocol access-group** *access-list-number,* **in | out**
IP Extended Access Lists 100-199 Set parameters for this access list entry	**access-list** *Access-list-number,* **permit |deny,** *protocol, source, source-mask,* *destination, destination-mask, [operator* ***operand],*** [established]
Enable an interface to become part of a group that uses the specified access list.	**protocol access-group** *access-list-number,* **in | out**
Assigns an alpha-numeric name string to an access list	**ip access-list standard | extended** *name*
Activates the access list on an interface	**ip access-group name | 1-199, in | out**
Can be used to verify whether access lists are set	**show ip interfaces**
Displays the contents of all access lists	**show access-lists**
IPX Standard Access Lists 800-899 Set parameters for this access list entry	**access-list** *Access-list-number,* **permit | deny,** *source-network [.source-node], [source-node-mask], [destination-network], [.destination-node] [destination-node-* *mask]*
Enable an interface to become part of a group that uses the specified access list.	**ipx access-group** *access-list-number,* **in | out**
IPX Extended Access Lists 900-999 Set parameters for this access list entry	**access-list** *Access-list-number,* **permit |** **deny, protocol,** *source-network [[[.source-node]source-node-mask] | [.source-node source-network-mask.source-node-mask]], [source-socket], [destination-network],[[[. destination-node] destination-node-mask] | [destination-node destination-network-*

	mask.destination-node-mask]], [destination-socket], [log]
Enable an interface to become part of a group that uses the specified access list.	**ipx access-group** *access-list-number,* **in | out**
IPX SAP Filter Access Lists 1000-1099 Creates an entry in a SAP filter list	**access-list** *Access-list-number,* **permit | deny,** *network [.node], [network-mask node-mask], [service-type [server-name]]*
Activates the output SAP filter on the interface	**ipx output-sap-filter** *access-list-number*
Activates the input SAP filter on the interface	**ipx input-sap-filter** *access-list-number*
Displays information about the config of the interface including SAP filter numbers.	**show ipx interface**

WAN configuration	
PPP Authentication On each router defines the username and password to expect from the remote router	**username** *name* **password** *secret*
Configure the interface for ppp encapsulation	**encapsulation ppp**
Configure ppp authentication type	PPP authentication chap | chap pap |pap chap | pap
Enables PAP on an interface (disabled by default)	**ppp pap sent-username** *username* **password** *password*
To use the same host name on multiple routers	**ppp chap hostname** *hostname*
Use to authenticate to an unknown host. This password is not used when the router authenticates a remote device.	**ppp chap password** *secret*
Displays authentication sequence as it occurs	**debug ppp authentication**
Configuring Frame Relay Specifies encapsulation type.	**encapsulation frame-relay [cisco | ietf]**
Specifies LMI type used by the FR switch. (default cisco)	**frame-relay lmi-type ansi | cisco | q933i**
Inverse ARP is enabled by default. If it has been disabled use this command to enable it.	**frame-relay inverse-arp [protocol] [dlci]**
Used to define the address to DLCI table statically.	**frame-relay map** *protocol protocol-address dlci* **[broadcast] [ietf | cisco]**

Displays the route maps (static or dynamic)	**show frame-relay map**
Displays LMI information	**show frame-relay lmi**
Selects a subinterface to configure	**interface serial** *number.subinterface-number* **multipoint | point-to-point**
Defines the local DLCI number being linked to the interface	**frame-relay interface-dlci** *dlci-mumber*
Misc. Commands	
Remove 10 minute interval router waits for input	**no exec-timeout or exec-timeout 0 0**
Set clock	**clock set** *20:26:00 04 July 2001*
Change number of lines history will record (max 256)	**terminal history size** *"lines"*
Sets token ring speed to 16 Mbps	**ring-speed 16**
Enables early token release	**early-token release**
Specifies a media independent interface physical connection	**media-type 10baseT**
set the configuration register (where to boot from) 0 for ROM Monitor, 1 for ROM, 2 NVRAM.	**config-register 0x2102**