

show version

Hardware and software info

ping *n.n.n.n*
traceroute *n.n.n.n*
telnet *n.n.n.n*

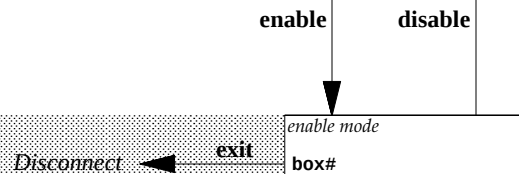
(Ctrl-6 to abort output)

Cisco Router Basic Configuration

no *xxxxx...* to remove any setting
 Type ? at any point for parameter help

show int eth 0
show int ser 0
show ip route
show arp
show ip ospf [*int | neighbor | database*]

Show status of ethernet 0
 Show status of serial 0
 Show IP forwarding table
 Show ARP cache
 Show OSPF state

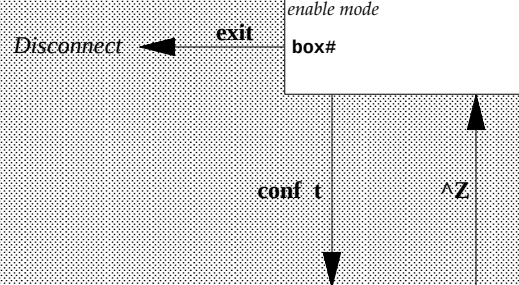


show run
show conf
write mem
reload

Show currently running configuration
 Show configuration which is in NVRAM
 Write current configuration into NVRAM
 Reboot the router

clock set *hh:mm:ss dd monthname yyyy*

Set system clock



ip classless
ip subnet-zero
no ip domain-lookup
service password-encryption

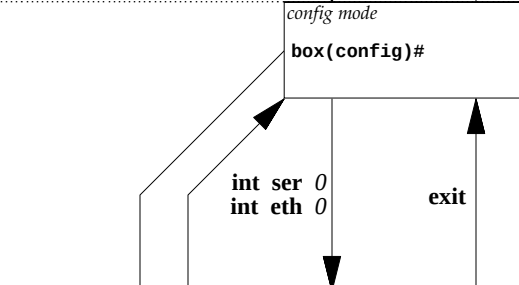
Enable CIDR variable-length prefixes [default in 12.0]
 Also required to enable CIDR [default in 12.0]
 Prevent traceroute from doing reverse DNS lookups
 Obscure passwords when displaying configuration (*not secure!*)

☆ **ip route** *n.n.n.n m.m.m.m g.g.g.g*

Add static route to forwarding table: *network, netmask, next hop gateway*

enable secret *word*
hostname *name*

Set the enable password (to restrict enable mode)
 Set router name ("box" in this example)



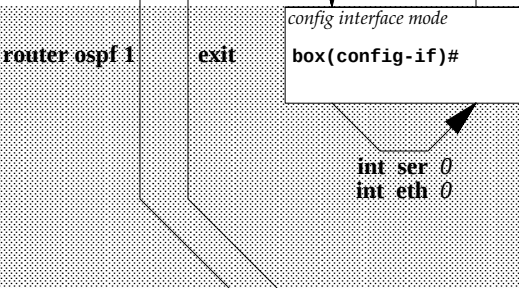
ip address *n.n.n.n m.m.m.m*
no shutdown
ip ospf cost *100*

Set interface IP address and prefix length (netmask)
 Enable interface (remove "administrative shutdown")
 Assign OSPF cost to this interface

[Ethernet only]
arp timeout *300*
no ip redirects
no ip proxy-arp
 [Serial only]
ip unnumbered eth 0
encap *ppp*

Set ARP timeout to 300 seconds (default is 4 hours)

Unnumbered: use the IP number from eth 0 as the local IP address on this int.
 Set encapsulation to PPP (default is Cisco HDLC)



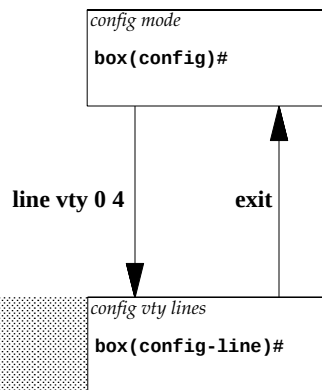
☆ **network** *n.n.n.n x.x.x.x area 0*

Speak OSPF on this network (*n.n.n.n* = network number, *x.x.x.x* is "wildmask" which is a netmask with 0 and 1 inverted; e.g. /28 wildmask is 0.0.0.15)

redistribute connected subnets
redistribute static subnets
default-information originate

Announce directly-connected networks (including those not talking OSPF)
 Announce manually-inserted static routes, except default
 Announce static default route

☆ Repeat command as necessary



snmp community password ro [1-99]
access-list 1-99 permit n.n.n.n x.x.x.x

ip cef [not 2500 series]

clock timezone EST 1
ntp server x.x.x.x
logging buffered 16384 debugging
service timestamps log datetime localtime
service timestamps debug datetime localtime

Enable read-only SNMP access (optional: limit to access list)
 Add entry to basic access list - source IP address and wildmask

Enable Cisco Express Forwarding - route caching and load-sharing

Set timezone/hours offset from GMT
 Synchronise clock to ntp server
 Allocate more logging memory
 Enable "real" timestamps on log entries; otherwise you get time since last reboot. Use "show log" to view log entries.

login
password xxxxx

login local
 ☆ **username xxxxx password yyyy**

transport preferred none
escape-character 3

access-class 1-99 in

Require password to access router via telnet

(alternative) Require username *and* password

Prevent unknown commands from being interpreted as hostnames
 Use Ctrl-C as interrupt character (instead of Ctrl-6)

Restrict telnet logins using access list