Faculty of Computing



**[CCN]**

**Lab No 9 (Create Network Topology using Commands)**

Router configuration modes: 1- User mode ( router > ).

1- Privilege mode ( router # ).

2- Global configuration ( router (config)#) .

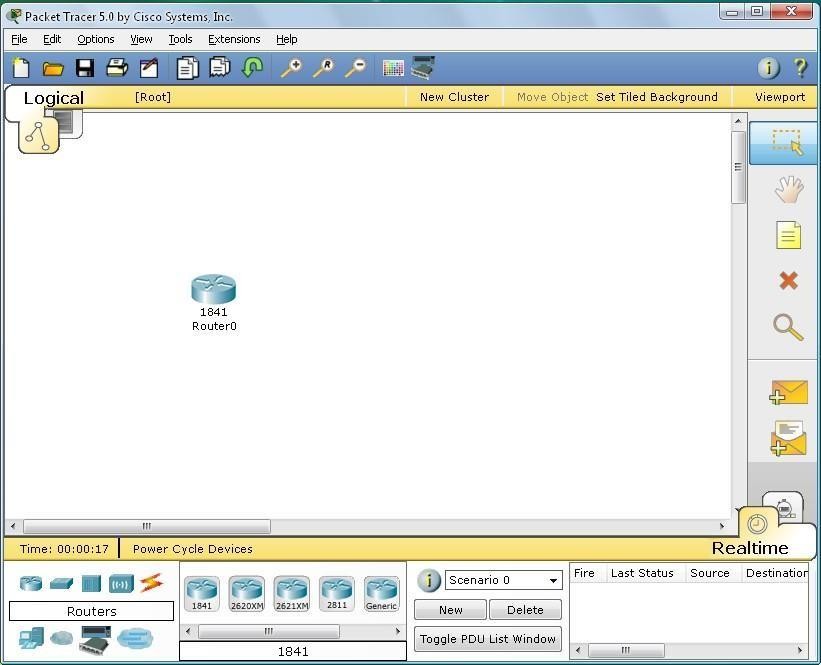
enable disable

Global

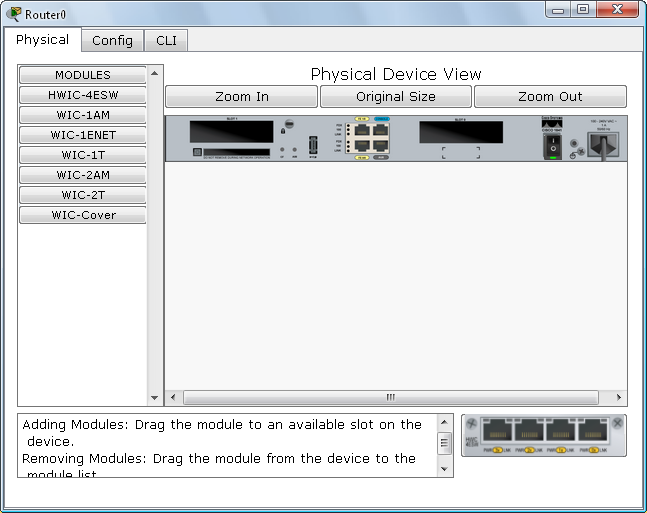
Privilage conf t exit

User

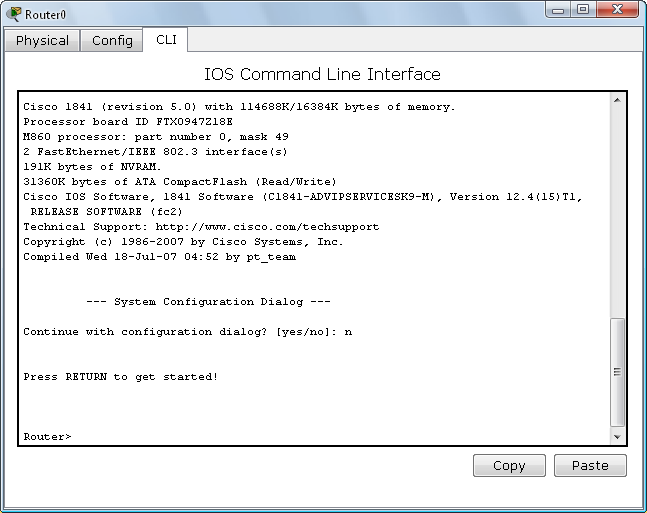
Use packet tracer program for router configuration in the 3 previous modes. Choose router:



Double click on the router chosen:

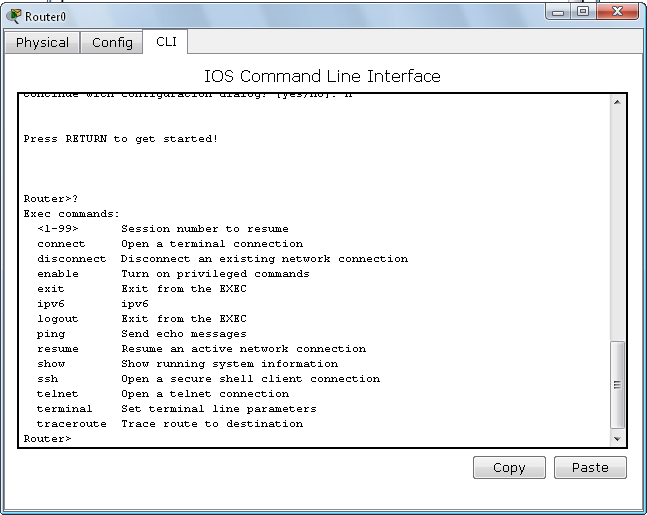


We enter CLI for router configuration:

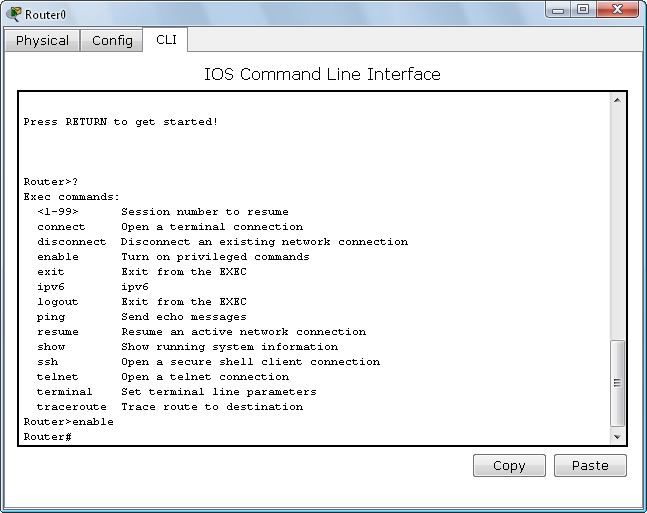


Now we are in the user mode:

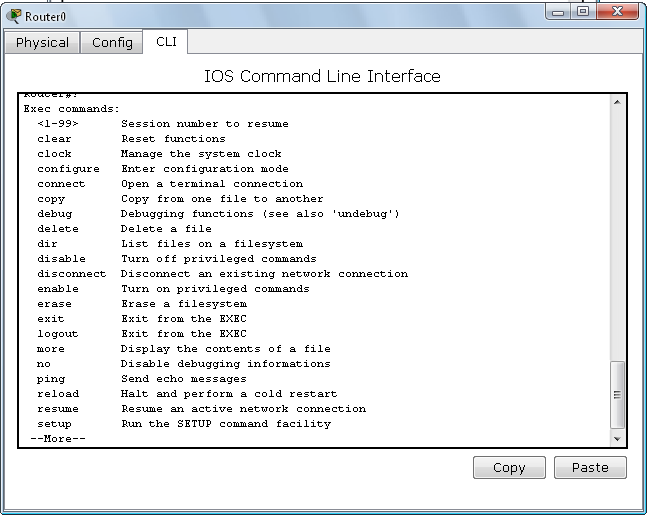
To know the commands in user mode we use (?):



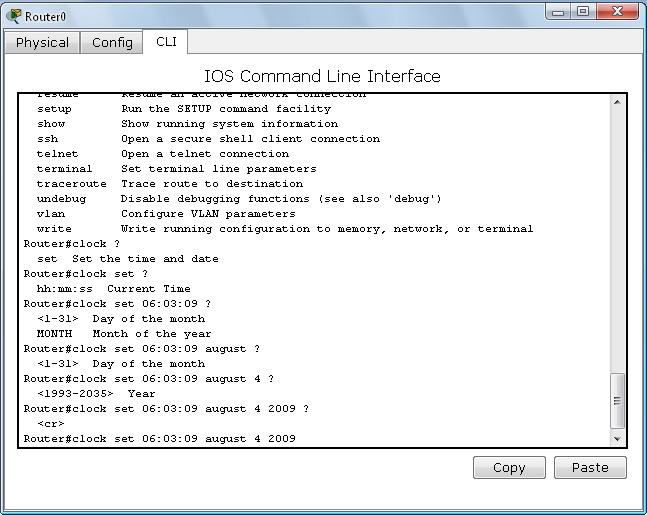
To enter the privilege mode, we use (enable):



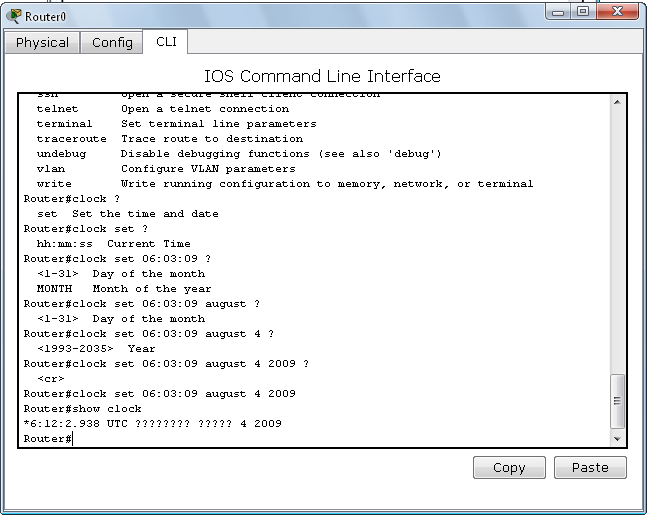
To see the commands in privilege mode we use (?):



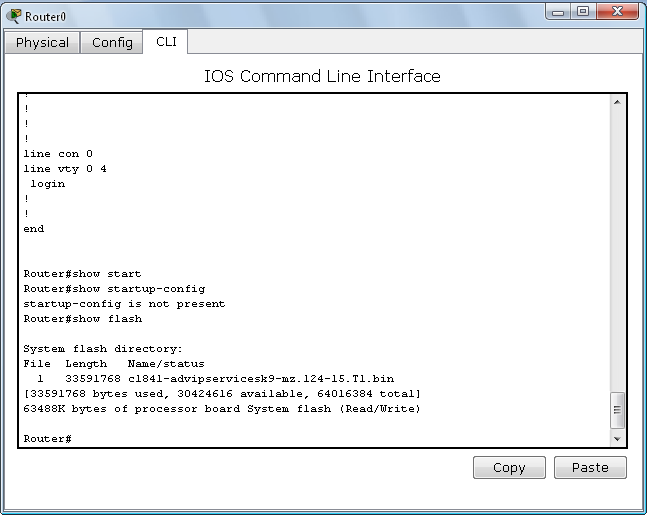
To manage the system clock, we use (clock):

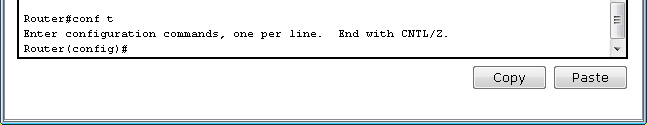


To see the time, we use (show clock):



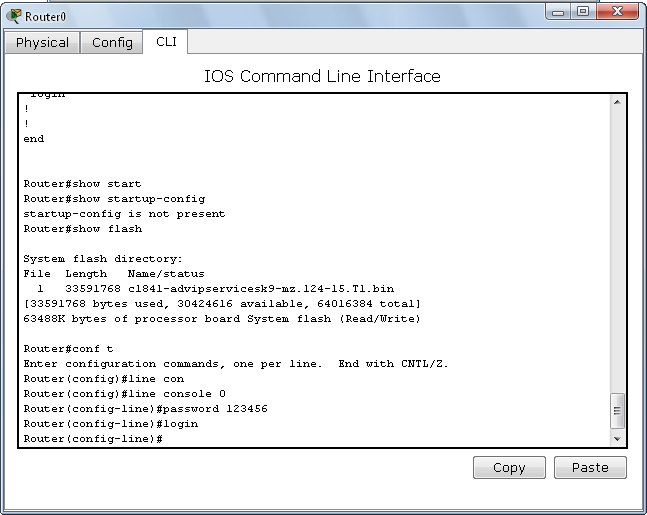
To see content of flash memory we use (show):

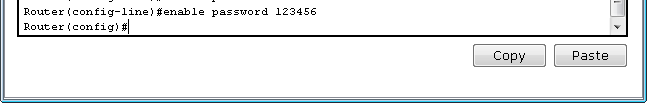


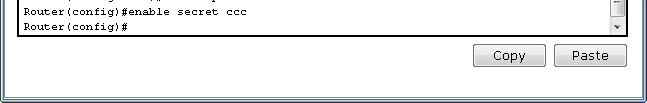
To go to global configuration we use (conf t):

Passwords:

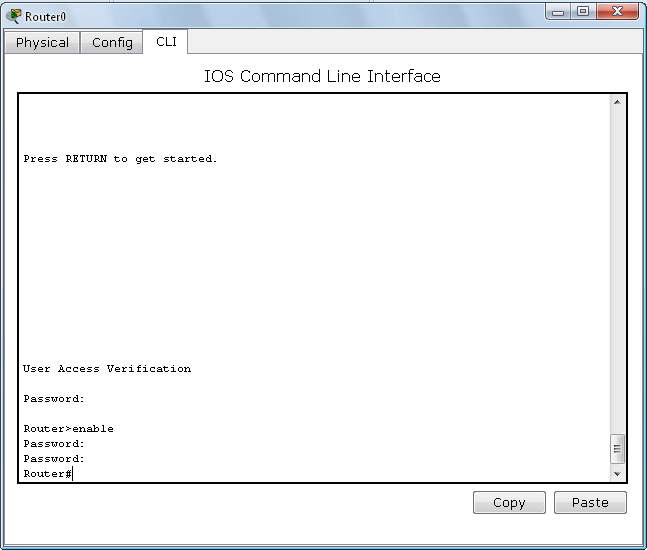
Lone console password to protect the user mode:



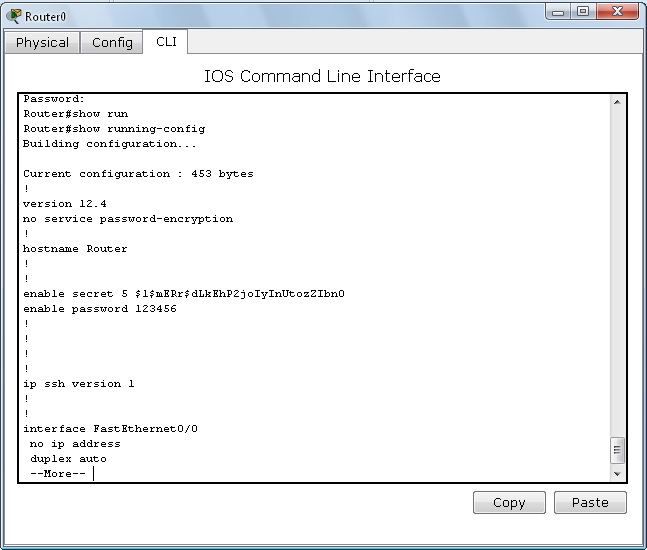
1. Enable password to protect the privileged mode:
2. Secret password for more protection of privileged mode (more priority than enable pass and its encrypted pass.



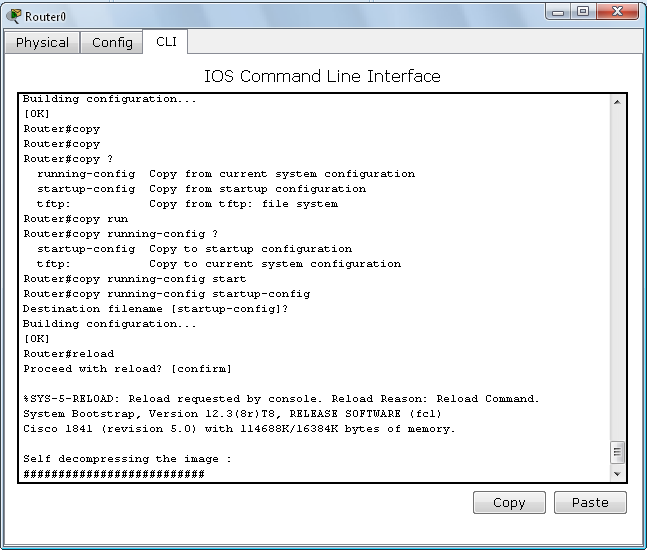
Now we try the passwords set:

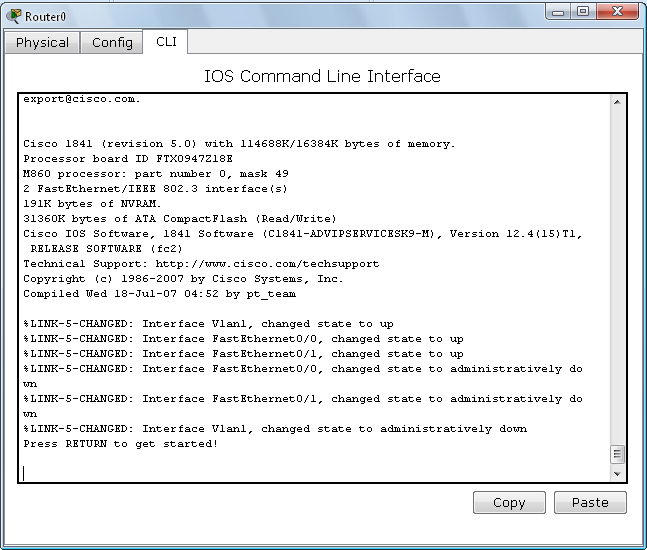


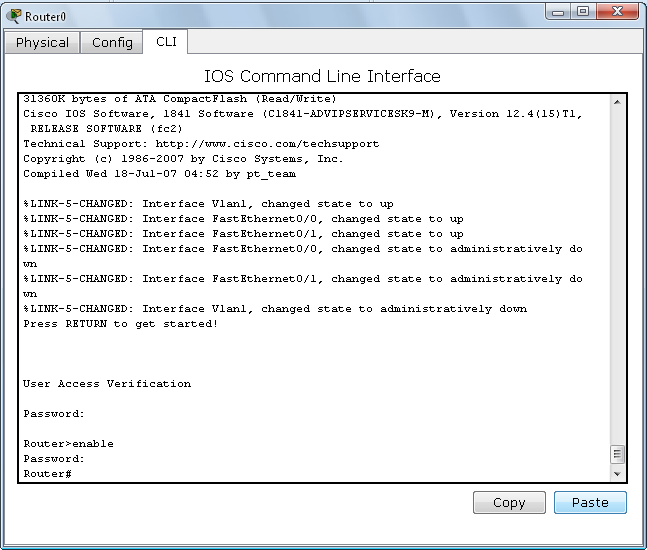
We notice that only secret pass is encrypted:

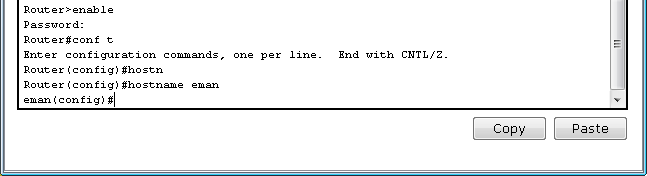


To restart we use the command (reload):







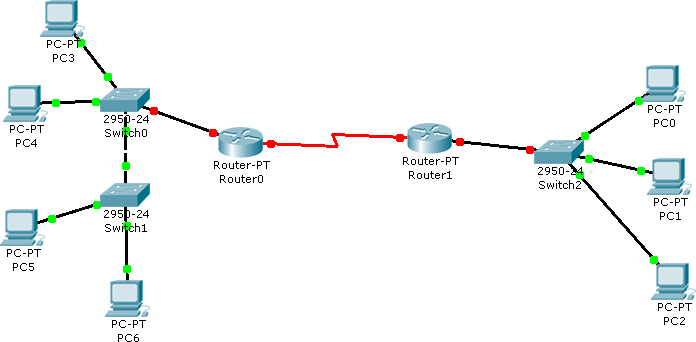
To change the host name of router:

Using packet tracer in addressing: 1- We connect the figure. The cables used are:

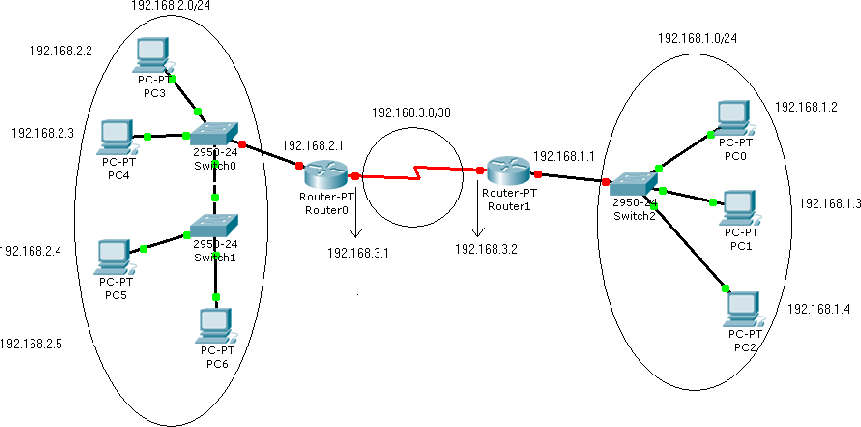
Straight: between switch, pc and router, switch.

Cross: between switch, switch.

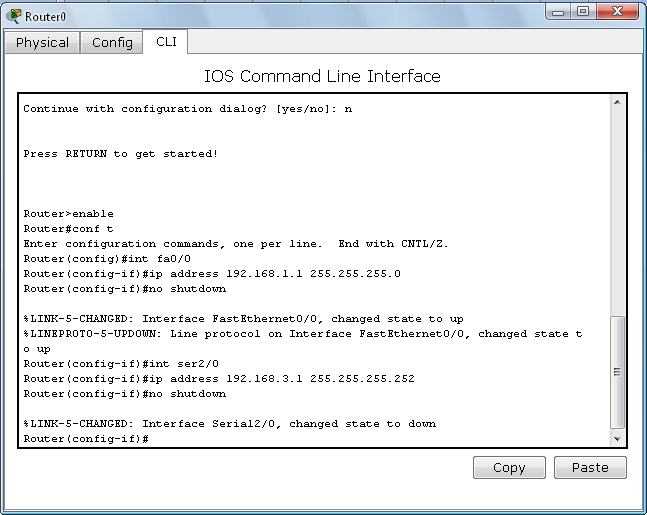
* Serial: between the two routers.



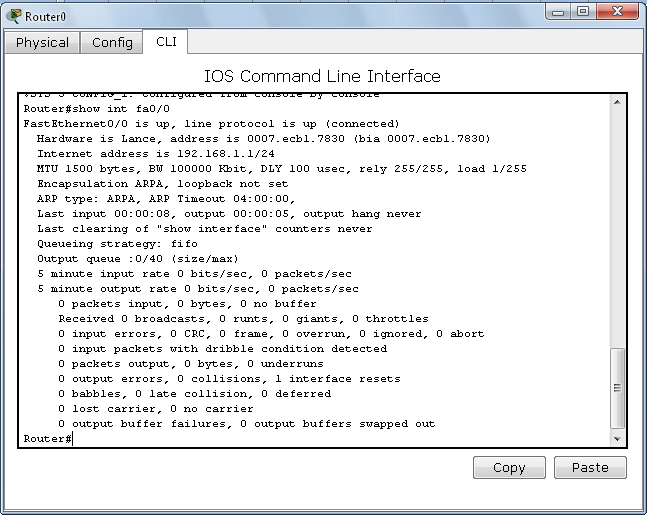
2- We put the IP address for each device as the following: We have in the figure 3 networks:

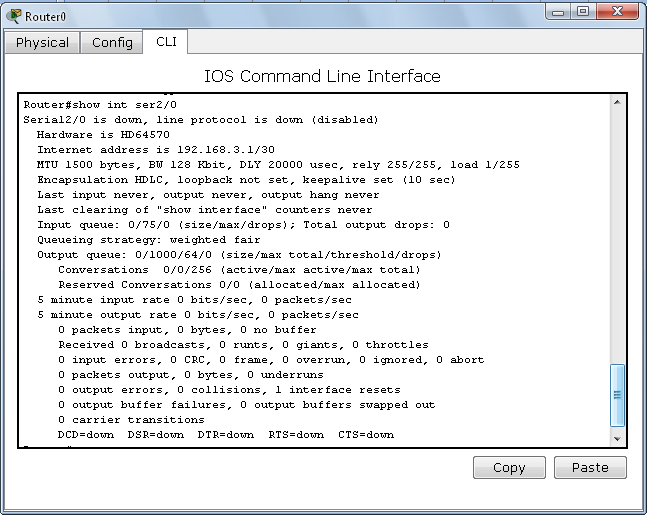


To distribute the Ip's on the router interfaces we do the following:

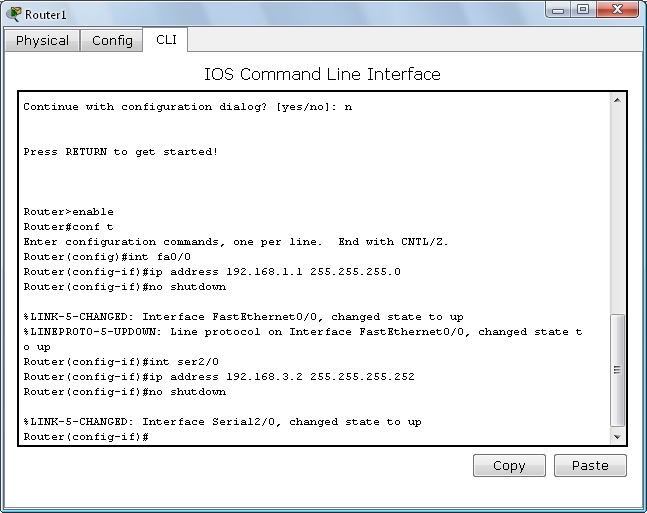


To make sure of the IP:

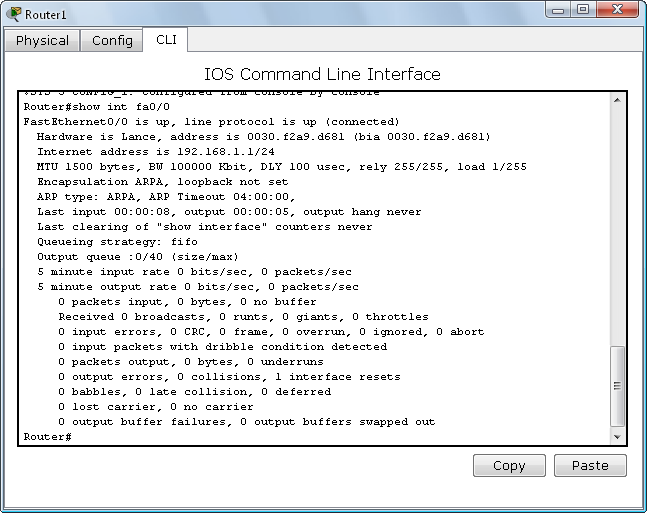


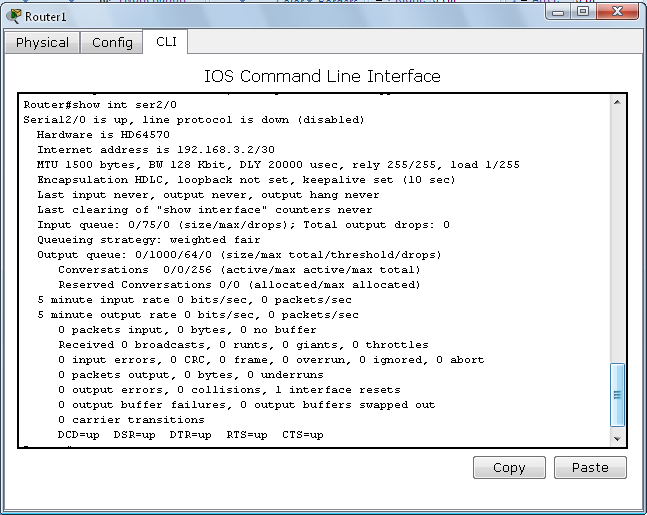


For the second router:

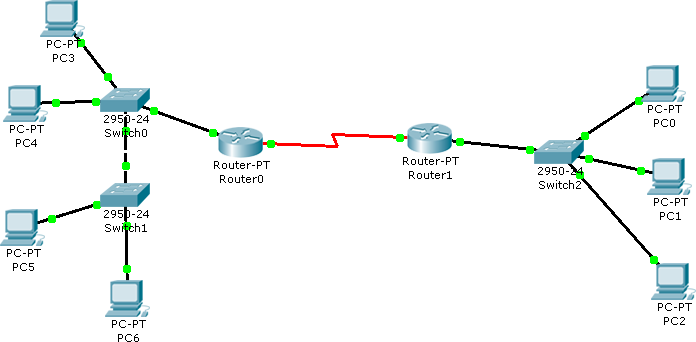


To make sure of IP's:

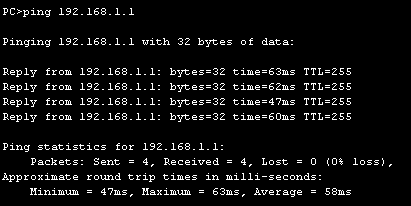




Now we notice that all points in the figure became green:



How to ping on default gate way: For PC0:

We chose command prompt and ping on the default gateway: