Computer Network Lab Task 12

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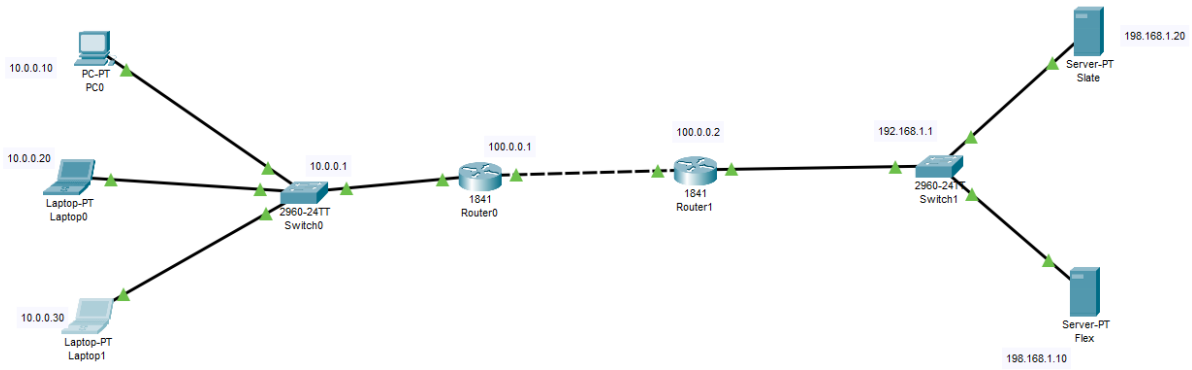
Section: BSCS(5B)

The topology of our whole process is attached below.



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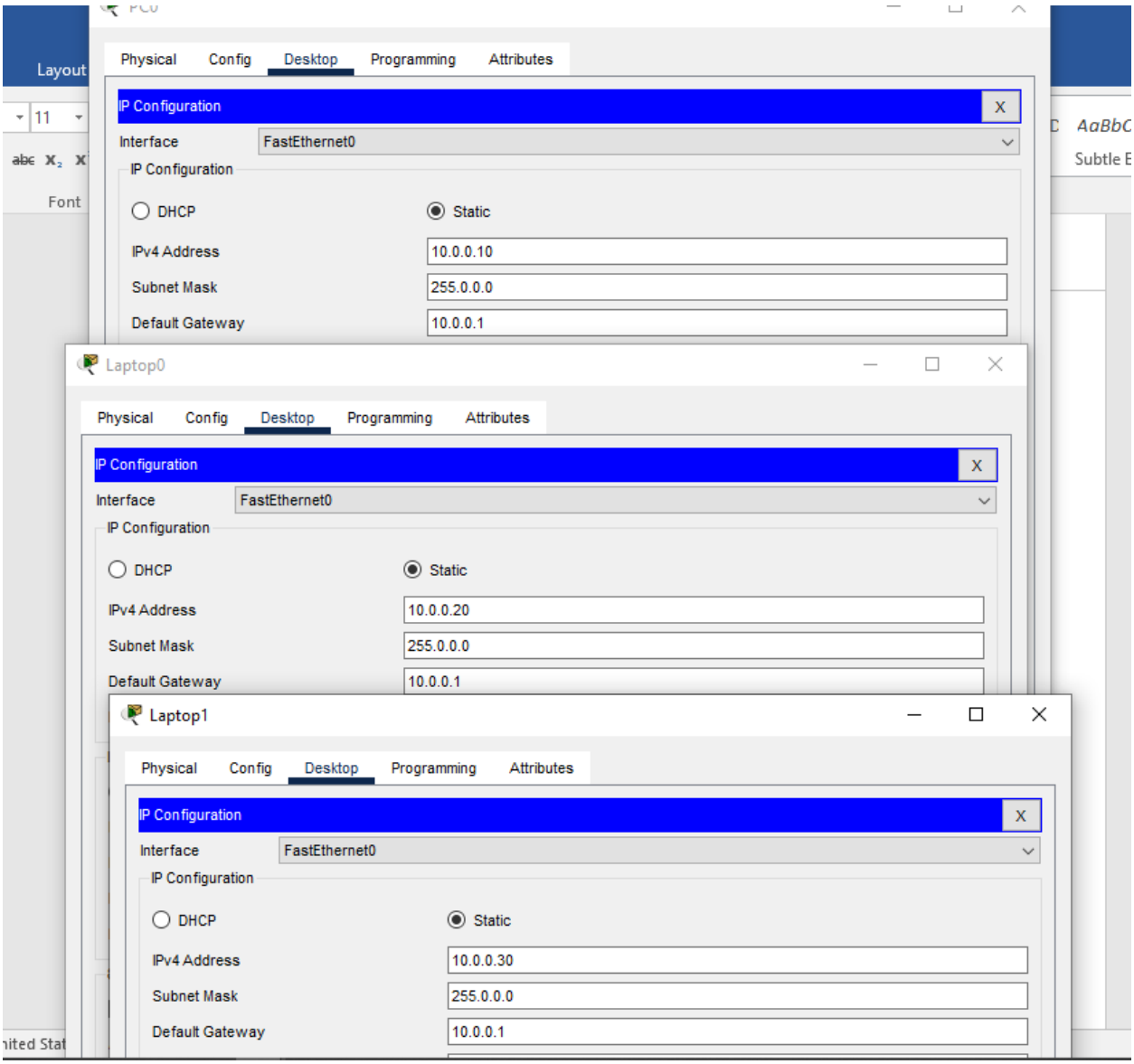
The IP Configuration of our PC's is mentioned below:



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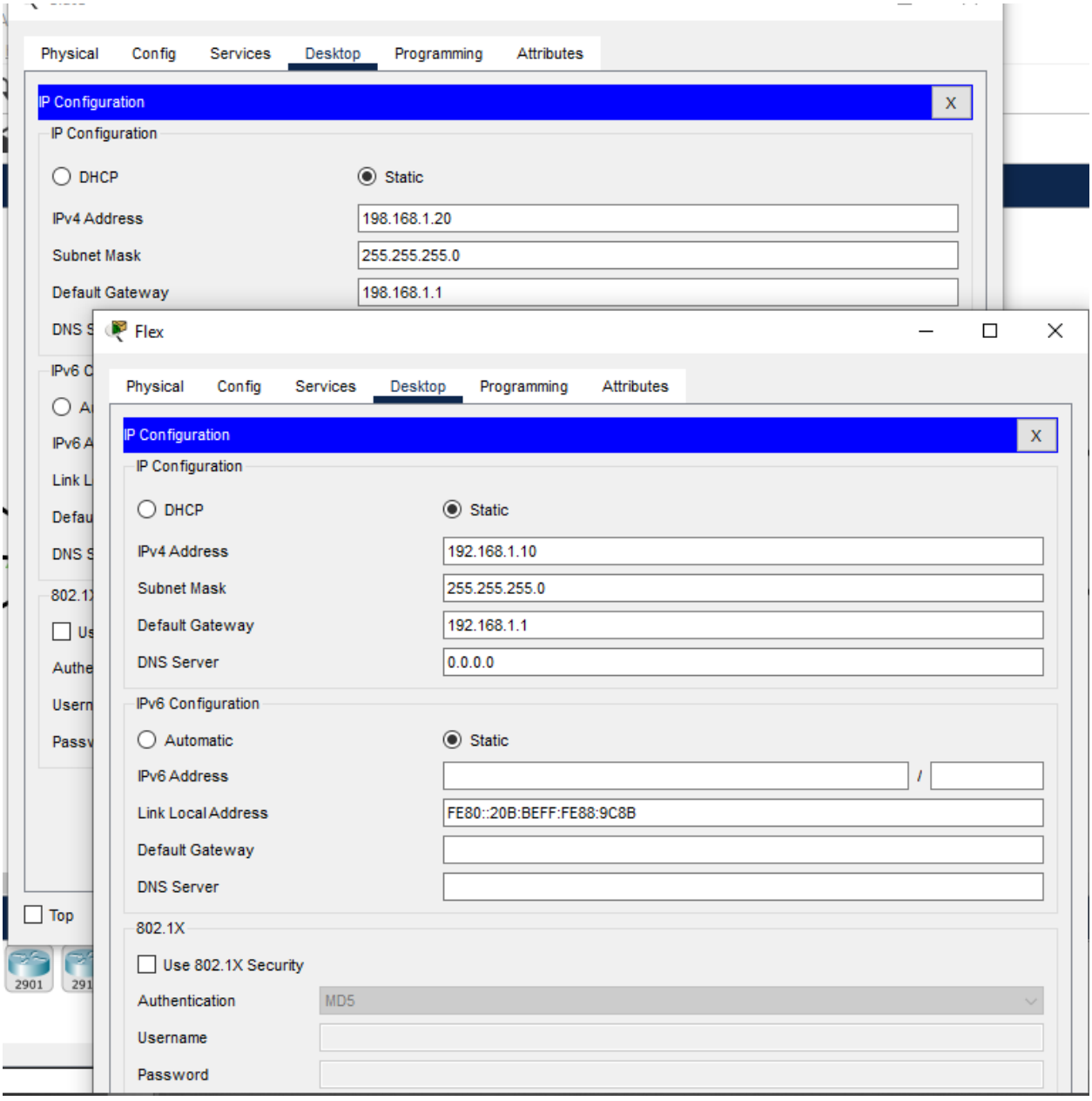
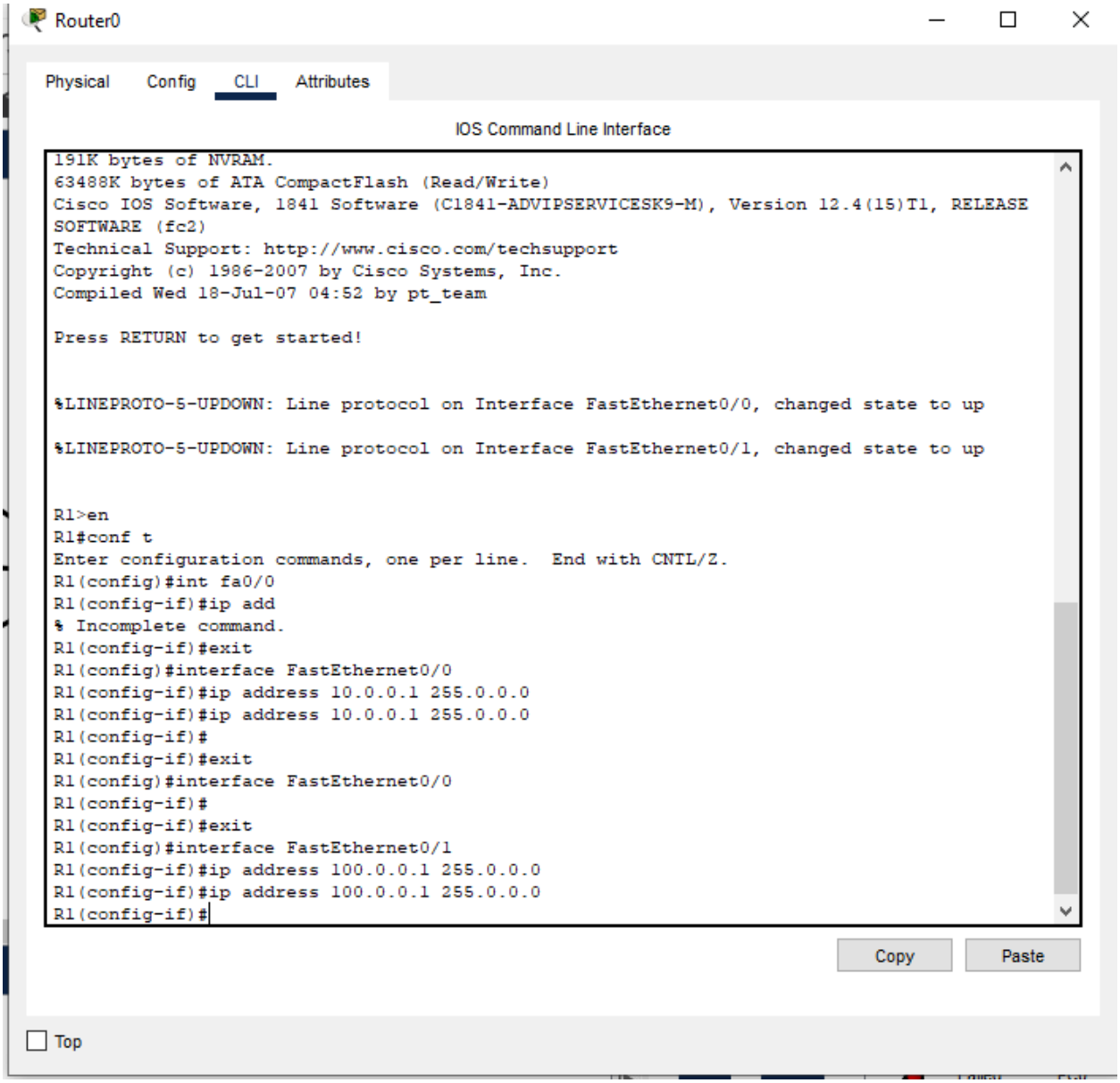
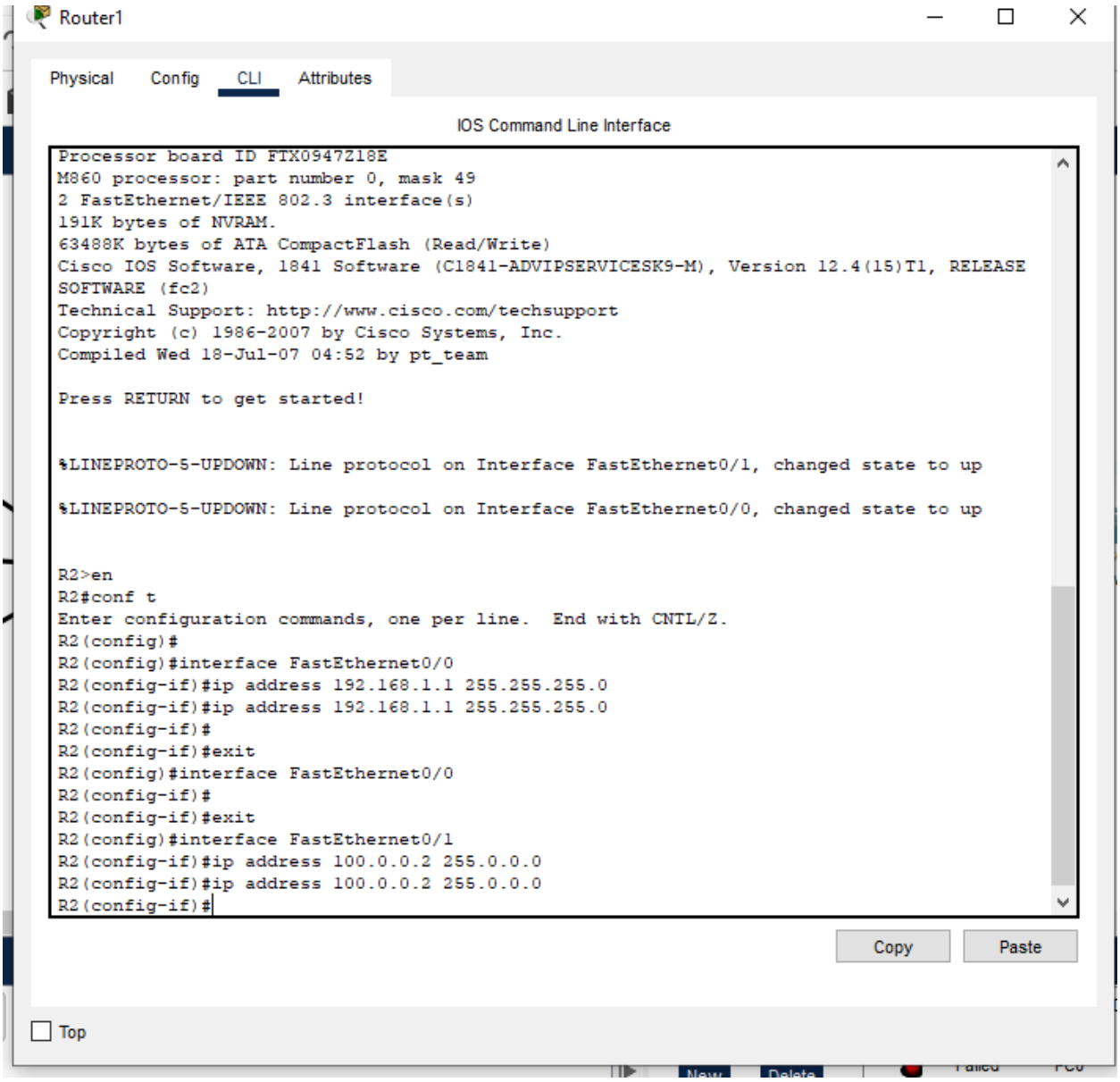
The IP Configuration of our servers is attached below:



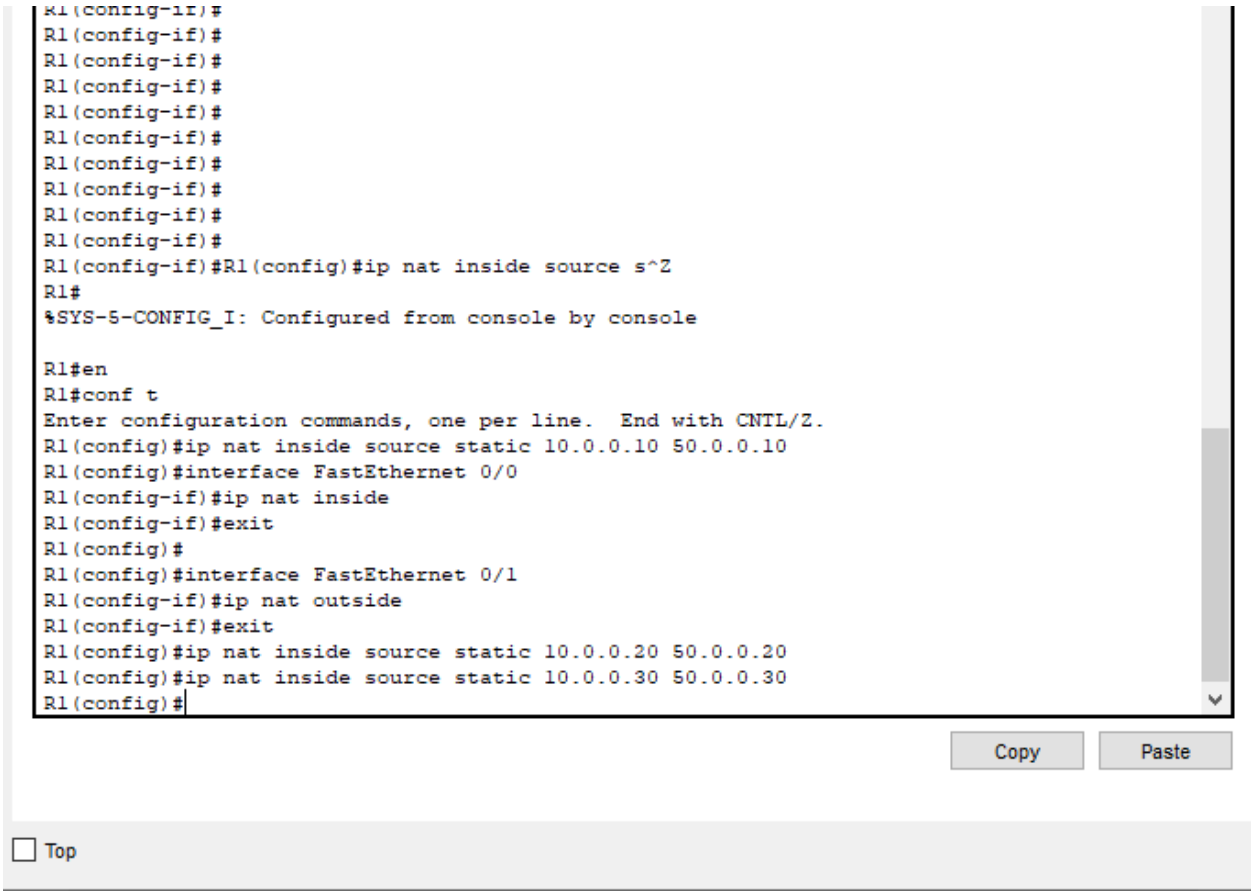
IOS Command Line Configuration for both of the Routers is attached in the below picture.


Router0
Physical
Config
CLI
Attributes
IOS Command Line Interface
191K bytes of NVRAM.
63488K bytes of ATA CompactFlash (Read/Write)
Cisco IOS Software, 1841 Software (C1841-ADVIPSERVICESK9-M), Version 12.4(15)T1, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed 18-Jul-07 04:52 by pt_team
Press RETURN to get started!
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
R1>en
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#int fa0/0
R1(config-if)#ip add
% Incomplete command.
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/0
R1(config-if)#
R1(config-if)#exit
R1(config)#interface FastEthernet0/1
R1(config-if)#ip address 100.0.0.1 255.0.0.0
R1(config-if)#ip address 100.0.0.1 255.0.0.0
R1(config-if)#
Copy
Paste
Top



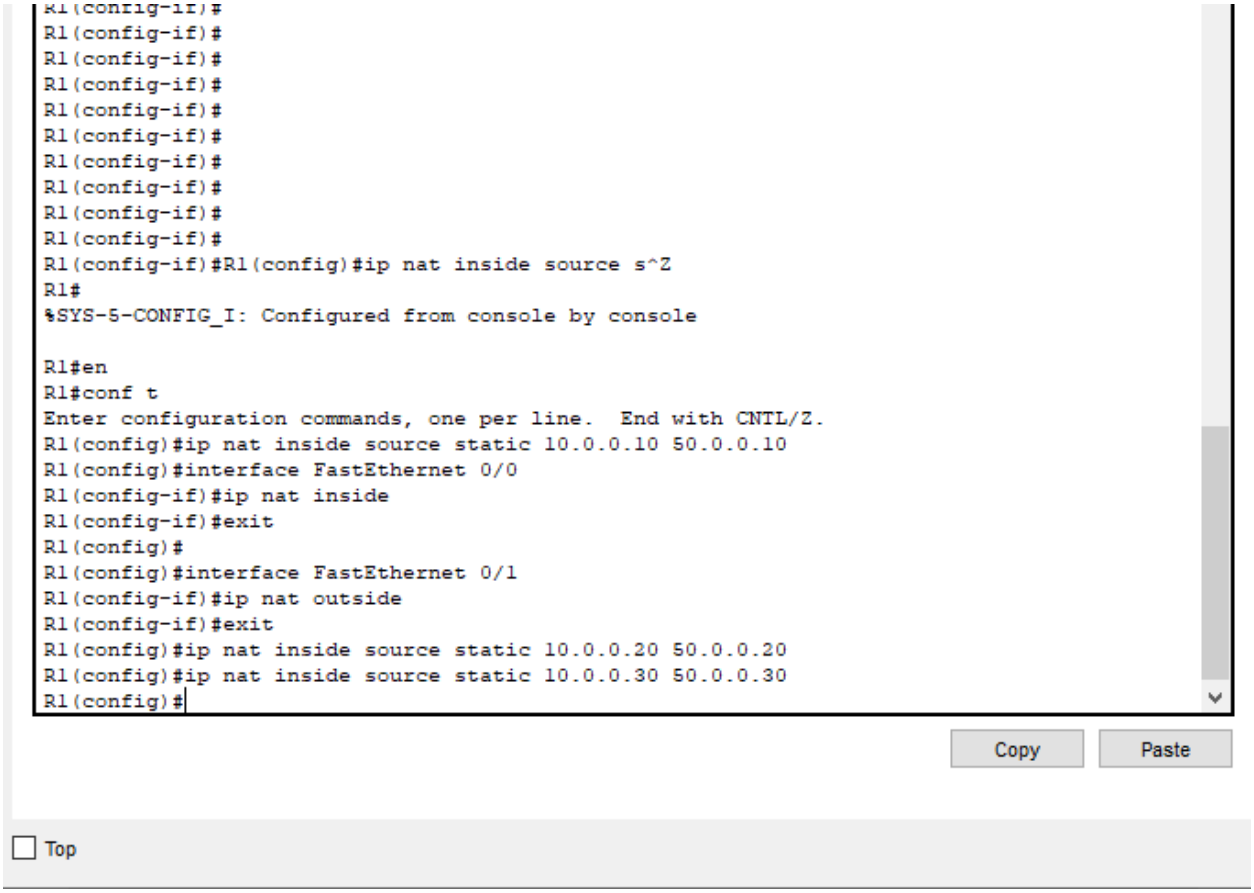
Configure Static NAT:

Here we are doing R1 Static NAT Configuration for the router 1.



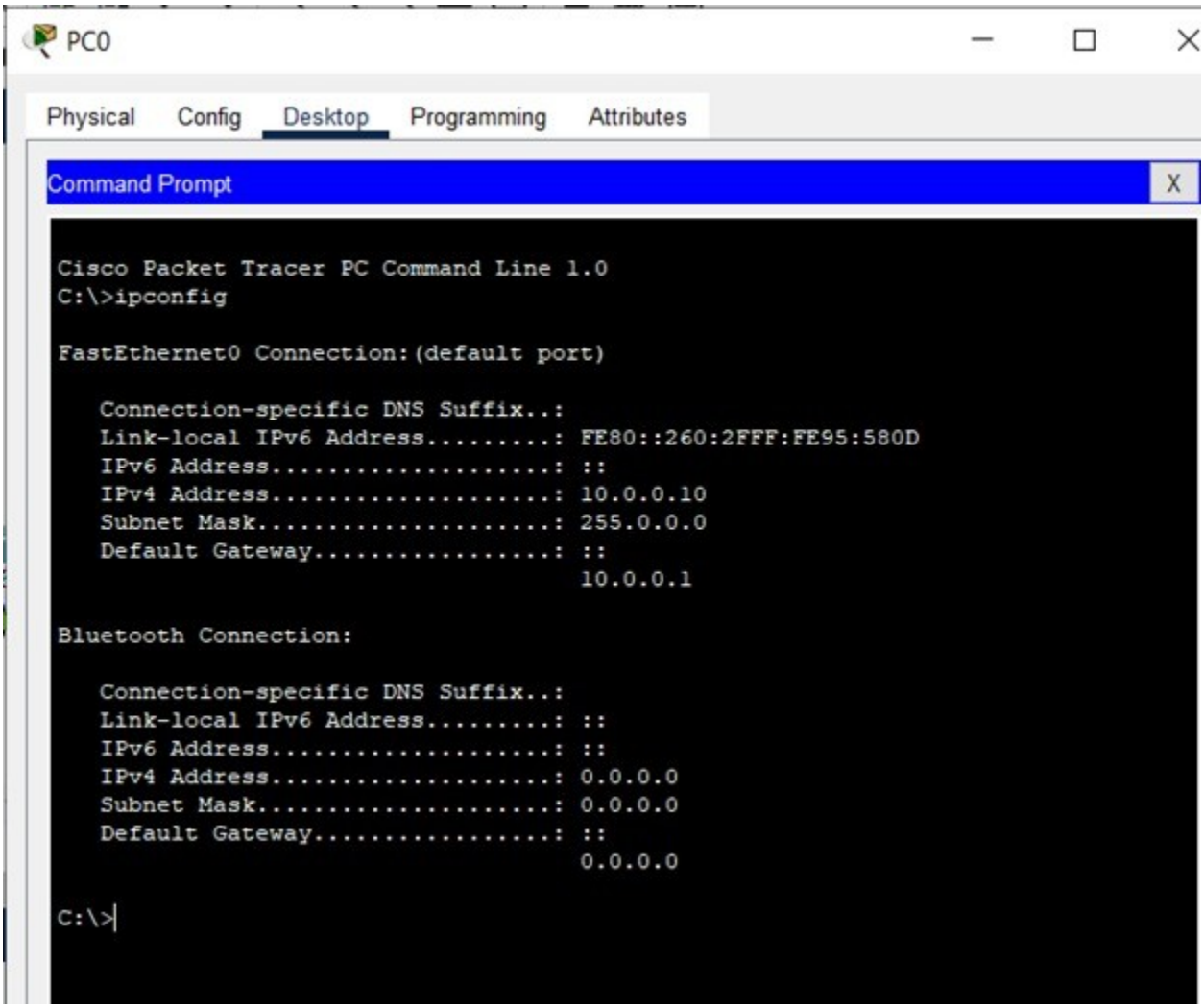
R2 Static NAT Configuration:

The Static Nat Configuration for router 2 is mentioned in the below picture.



To test this setup click Laptop0 and Desktop and click Command Prompt.

- **Run ipconfig command.**
- **Run ping 200.0.0.10 command.**
- **Run ping 192.168.1.10 command.**


PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig
FastEthernet0 Connection:(default port)
Connection-specific DNS Suffix..:
Link-local IPv6 Address.....: FE80::260:2FFF:FE95:580D
IPv6 Address.....: ::
IPv4 Address.....: 10.0.0.10
Subnet Mask.....: 255.0.0.0
Default Gateway.....: ::
10.0.0.1
Bluetooth Connection:
Connection-specific DNS Suffix..:
Link-local IPv6 Address.....: ::
IPv6 Address.....: ::
IPv4 Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: ::
0.0.0.0
C:\>

```
C:\>ping 200.0.0.10

Pinging 200.0.0.10 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 200.0.0.10: bytes=32 time=11ms TTL=126
Reply from 200.0.0.10: bytes=32 time=11ms TTL=126

Ping statistics for 200.0.0.10:
```

```
C:\>ping 192.168.1.20

Pinging 192.168.1.20 with 32 bytes of data:

Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.

Ping statistics for 192.168.1.20:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Top

```
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 10.0.0.1: Destination host unreachable.
Reply from 10.0.0.1: Destination host unreachable.
Request timed out.
Reply from 10.0.0.1: Destination host unreachable.

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

Here we can see that we've successfully received the response of the ping test that we have performed between the PC's. This is showing the correctness of our topology.