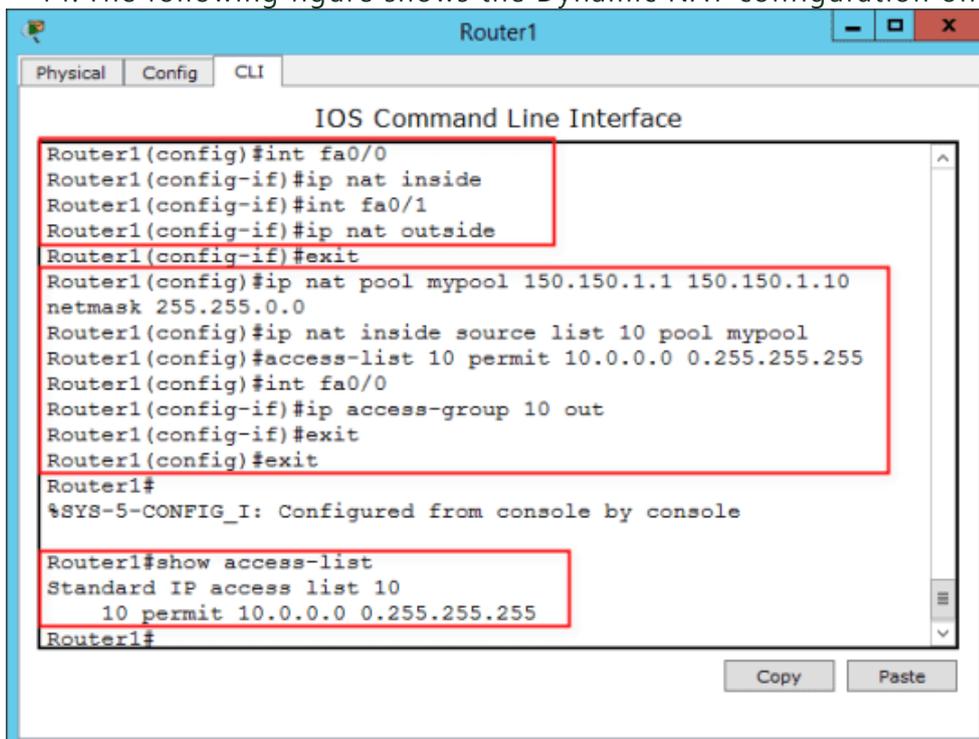


## How To Configure Dynamic NAT

### Steps to Configure Dynamic NAT

To configure dynamic NAT, you need to perform the following steps:

1. On Router1, execute the following commands to specify the inside and outside interfaces.
2. Router1(config)#int fa0/0
3. Router1(config-if)#ip nat inside
4. Router1(config-if)#exit
5. Router1(config)#int fa0/1
6. Router1(config-if)#ip nat outside  
Router1(config-if)#exit
7. Now, execute the following command to create a pool and specify the ranges that the NAT router will use to allocate IP addresses.  
Router1(config)#ip nat pool mypool 150.150.1.1 150.150.1.10  
netmask 255.255.0.0
8. Next, execute the following command to apply the created pool.  
Router1(config)#ip nat inside source list 10 pool mypool
9. Next, execute the following commands to apply an ACL to allow the networks.  
Router1(config)#access-list 10 permit 10.0.0.0 0.255.255.255
10. Next, execute the following command to specify the interface and the ACL direction.
11. Router1(config)#int fa0/0
12. Router1(config-if)#ip access-group 10 out
13. Router1(config-if)#exit  
Router1(config)#exit
14. The following figure shows the Dynamic NAT configuration on Router1.



```
Router1
Physical Config CLI
IOS Command Line Interface
Router1(config)#int fa0/0
Router1(config-if)#ip nat inside
Router1(config-if)#int fa0/1
Router1(config-if)#ip nat outside
Router1(config-if)#exit
Router1(config)#ip nat pool mypool 150.150.1.1 150.150.1.10
netmask 255.255.0.0
Router1(config)#ip nat inside source list 10 pool mypool
Router1(config)#access-list 10 permit 10.0.0.0 0.255.255.255
Router1(config)#int fa0/0
Router1(config-if)#ip access-group 10 out
Router1(config-if)#exit
Router1(config)#exit
Router1#
%SYS-5-CONFIG_I: Configured from console by console

Router1#show access-list
Standard IP access list 10
 10 permit 10.0.0.0 0.255.255.255
Router1#
```

The screenshot shows a Cisco Router CLI window titled "Router1" with tabs for "Physical", "Config", and "CLI". The main window is titled "IOS Command Line Interface" and contains the following text:

```
Router1(config)#int fa0/0
Router1(config-if)#ip nat inside
Router1(config-if)#int fa0/1
Router1(config-if)#ip nat outside
Router1(config-if)#exit
Router1(config)#ip nat pool mypool 150.150.1.1 150.150.1.10
netmask 255.255.0.0
Router1(config)#ip nat inside source list 10 pool mypool
Router1(config)#access-list 10 permit 10.0.0.0 0.255.255.255
Router1(config)#int fa0/0
Router1(config-if)#ip access-group 10 out
Router1(config-if)#exit
Router1(config)#exit
Router1#
%SYS-5-CONFIG_I: Configured from console by console

Router1#show access-list
Standard IP access list 10
 10 permit 10.0.0.0 0.255.255.255
Router1#
```

At the bottom of the window, there are "Copy" and "Paste" buttons.

## Verify Dynamic NAT configuration

1. To verify dynamic NAT configuration, open command prompts on PC0 and PC1 and type the following command on both PCs:  
Ping 192.168.1.2
2. Now, execute the following command to show the translated IP addresses.  
Router1#show ip nat translations

Verify that the private IP address is translated into a global IP address from the configured pool.