

How to Configure Static NAT

Steps to Configure Static NAT

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

1. On Router1, execute the following command to specify the inside interface that is Fa0/0.

```
Router1(config)#int fa0/0
Router1(config-if)#ip nat inside
Router1(config-if)#exit
```

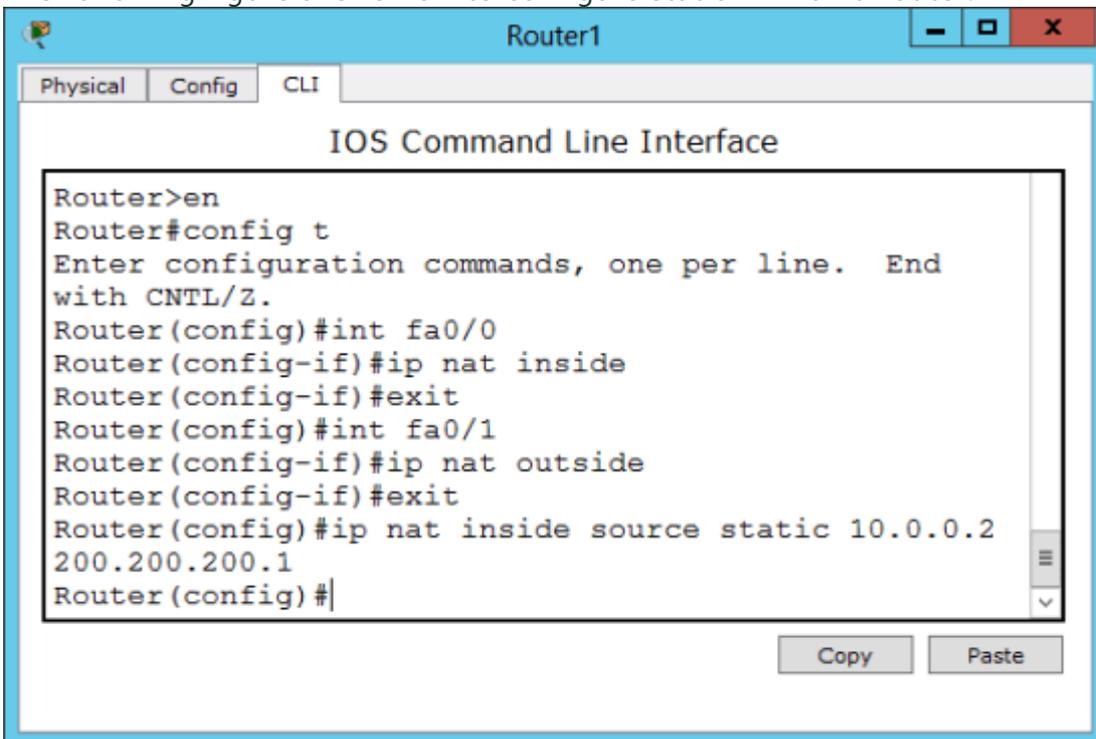
2. Next, execute the following command to specify the outside interface that is Fa0/1.

```
Router1(config)#int fa0/1
Router1(config-if)#ip nat outside
Router1(config-if)#exit
```

3. Once, you have defined the inside and outside interfaces, now you need to specify the private IP addresses that need to be translated into the public IP addresses. In this case, we will translate 10.0.0.2 private IP address into 200.200.200.1 public IP address. To do so, execute the following command.

```
Router1(config)#ip nat inside source static 10.0.0.2
200.200.200.1
```

4. The following figure shows how to configure static NAT on a router.



The screenshot shows a window titled "Router1" with tabs for "Physical", "Config", and "CLI". The main area displays the "IOS Command Line Interface" with the following commands entered:

```
Router>en
Router#config t
Enter configuration commands, one per line. End
with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#int fa0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#ip nat inside source static 10.0.0.2
200.200.200.1
Router(config)#
```

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

```

Router1
Physical Config CLI
IOS Command Line Interface
Router>en
Router#config t
Enter configuration commands, one per line. End
with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#int fa0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#ip nat inside source static 10.0.0.2
200.200.200.1
Router(config)#
Copy Paste

```

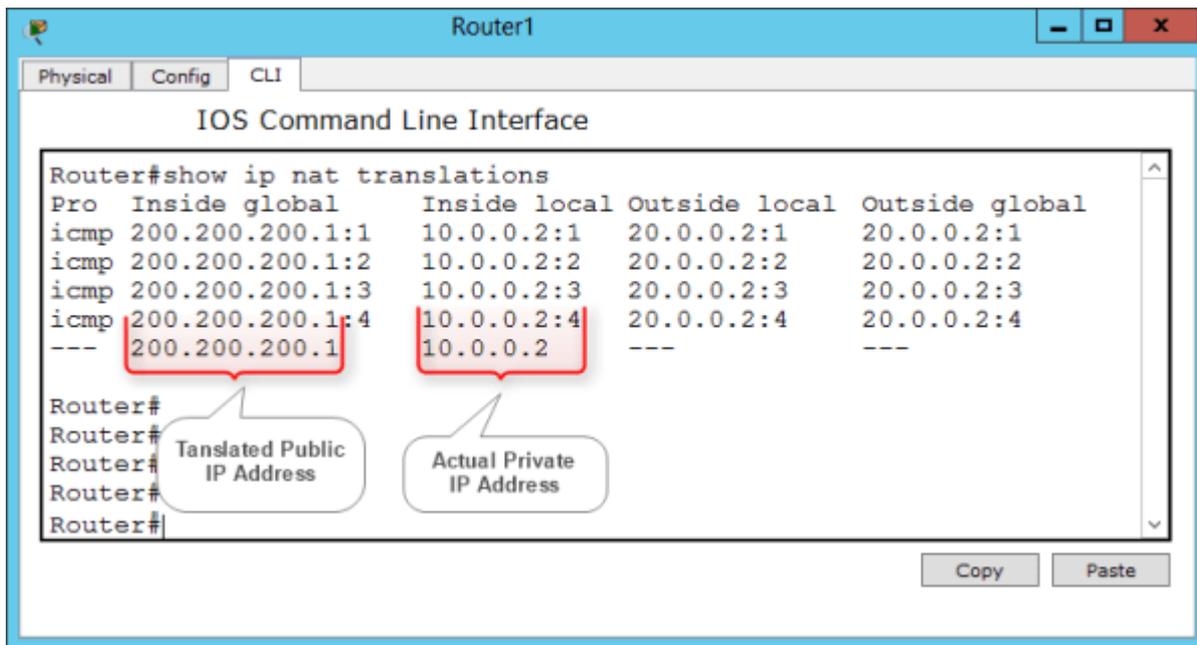
- 5.
6. Once, you have configured Static NAT, now it's time to verify your configuration.
7. To verify the static NAT configuration, open **Command Prompt** on PC0, type ping 20.0.0.2. Leave the Command Prompt active.
8. Move on to Router1 and type the following command to view the NAT translation table.

Router1#show ip nat translations

```

Router1
Physical Config CLI
IOS Command Line Interface
Router#show ip nat translations
Pro  Inside global      Inside local  Outside local  Outside global
icmp 200.200.200.1:1    10.0.0.2:1   20.0.0.2:1    20.0.0.2:1
icmp 200.200.200.1:2    10.0.0.2:2   20.0.0.2:2    20.0.0.2:2
icmp 200.200.200.1:3    10.0.0.2:3   20.0.0.2:3    20.0.0.2:3
icmp 200.200.200.1:4    10.0.0.2:4   20.0.0.2:4    20.0.0.2:4
---  200.200.200.1      10.0.0.2     ---           ---
Router#
Router#
Router#
Router#
Router#
Copy Paste

```



In the preceding figure, you can see that 10.0.0.2 private IP address has been translated into 200.200.200.1 public IP address.

Removing NAT Configuration

If you have mapped a wrong IP address or want to disable the NAT translation for any reason, execute the following command.

```
Router1(config)#no ip nat inside source static 10.0.0.2
200.200.200.1
```