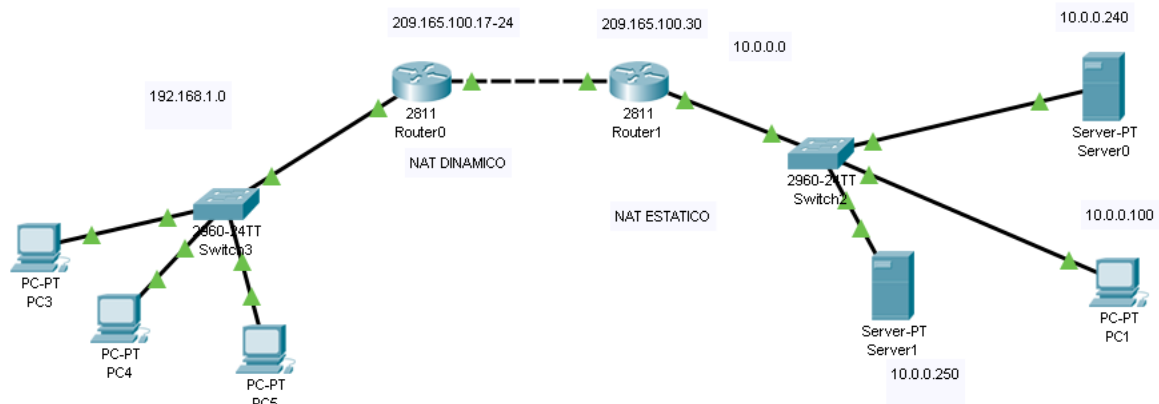Nombres de los estudiantes:

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1.DIAGRAMA DEL SISTEMA REALIZADO

2. LA IMAGEN DE LA CONFIGURACIÓN DE NAT ESTÁTICO PARA LOS DOS SERVIDORES

```
Router(config)#access-list 1 permit 10.0.0.0
0.0.0.255

Router(config)#ip nat inside source list 1
interface f0/1
Router(config)#int f0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#int f0/1
Router(config-if)#ip nat outside
Router(config-if)#ex
Router(config)#ex
Router#
```

3. La imagen de la verificación de NAT estático (usar los comandos show ip nat translations y show ip nat statistics)

Show ip nat translations

```
Router#show ip nat translations
Pro  Inside global      Inside local      Outside local
global
icmp 209.165.100.30:102410.0.0.100:10      192.168.1.101:10
192.168.1.101:1024
icmp 209.165.100.30:102510.0.0.100:11      192.168.1.101:11
192.168.1.101:1025
icmp 209.165.100.30:102610.0.0.100:14      192.168.1.101:14
192.168.1.101:1026
icmp 209.165.100.30:102710.0.0.100:15      192.168.1.101:15
192.168.1.101:1027
icmp 209.165.100.30:10 10.0.0.240:10      192.168.1.100:10
192.168.1.100:10
icmp 209.165.100.30:11 10.0.0.250:11      192.168.1.100:11
192.168.1.100:11
icmp 209.165.100.30:12 10.0.0.250:12      192.168.1.100:12
192.168.1.100:12
icmp 209.165.100.30:12 10.0.0.250:12      192.168.1.101:12
192.168.1.101:12
icmp 209.165.100.30:13 10.0.0.240:13      192.168.1.100:13
192.168.1.100:13
icmp 209.165.100.30:13 10.0.0.240:13      192.168.1.101:13
192.168.1.101:13
icmp 209.165.100.30:14 10.0.0.240:14      192.168.1.100:14
```

Show ip nat statistics

```
Router#show ip nat statistics
Total translations: 0 (0 static, 0 dynamic, 0 extended)
Outside Interfaces: FastEthernet0/1
Inside Interfaces: FastEthernet0/0
Hits: 1  Misses: 77
Expired translations: 25
Dynamic mappings:
```

4. La imagen de la configuración de NAT sobrecargado (PAT) para el PC1 (cambiar la IP para probar que funciona la ACL).

```
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip nat inside source list 1 interface 0/1 overload
```

Cambiando la ip 10.0.0.100 a 10.0.0.101

PC1 Desktop Config

DHCP / Static

IP Address: 10.0.0.101
Subnet Mask: 255.255.255.0
Default Gateway: 10.0.0.1
DNS Server: 0.0.0.0

IPv6 Configuration

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	N
●	Successful	PC1	PC4	ICMP		0.000	N	

5. La imagen de la configuración de NAT dinámico para la red de la izquierda.

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip nat pool natd 209.165.100.17 209.165.100.24 netmask
255.255.255.0
Router(config)#access-list 2 permit 192.168.1.0 0.0.0.255
Router(config)#ip nat inside source list 2 pool natd
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#ex
Router(config)#int fa0/1
Router(config-if)#ip nat outside
Router(config-if)#ex
Router(config)#ex
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

6. La imagen de la verificación de NAT dinámico (usar los comandos show ip nat translations y show ip nat statistics)

Show ip nat statistics

```
Router#show ip nat statistics
Total translations: 0 (0 static, 0 dynamic, 0 extended)
Outside Interfaces: FastEthernet0/1
Inside Interfaces: FastEthernet0/0
Hits: 0  Misses: 12
Expired translations: 0
Dynamic mappings:
-- Inside Source
access-list 2 pool natd refCount 0
 pool natd: netmask 255.255.255.0
        start 209.165.100.17 end 209.165.100.24
        type generic, total addresses 8 , allocated 0 (0%), misses 0
Router#
```

Show ip nat translations

```
Router#show ip nat translations
Pro   Inside global      Inside local       Outside local       Outside
global
icmp 209.165.100.18:5   192.168.1.100:5    209.165.100.30:5
209.165.100.30:5
icmp 209.165.100.18:6   192.168.1.100:6    209.165.100.30:6
209.165.100.30:6
icmp 209.165.100.19:3   192.168.1.103:3    209.165.100.30:3
209.165.100.30:3
icmp 209.165.100.20:4   192.168.1.101:4    209.165.100.30:4
209.165.100.30:4
```

Ping pc3 a 209.165.100.30