Cisco NAT Cheat Sheet

Order of Operations

- NAT, if any
- NAT, if any
- NAT, if any
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Regular Static NAT (One IP to One Server)

- Use the `ip nat pool` command to define a pool of NAT addresses
- Use the `ip nat inside source static` command to map an inside IP to an outside IP
- Configure the interface to use NAT

Notes:
- NAT is commonly used to translate private IP addresses to public IP addresses
- It requires a public IP address for each NAT rule
- NAT is not recommended for high traffic applications

Regular Static PAT (One IP to Multiple Servers)

- Use the `ip nat pool` command to define a pool of NAT addresses
- Use the `ip nat outside source static` command to map an inside IP to an outside IP
- Configure the interface to use NAT

Notes:
- Static PAT is commonly used to translate private IP addresses to a single public IP address
- It requires a single public IP address for each NAT rule
- Static PAT is not recommended for high traffic applications

Static Policy NAT

- Use the `ip nat pool` command to define a pool of NAT addresses
- Use the `ip nat inside source static` command to map an inside IP to an outside IP
- Configure the interface to use NAT

Notes:
- Static Policy NAT is commonly used to translate private IP addresses to a single public IP address
- It requires a single public IP address for each NAT rule
- Static Policy NAT is not recommended for high traffic applications

Regular Dynamic Interface NAT/PAT (Basic Internet Access)

- Use the `ip nat translate` command to map inside addresses to outside addresses
- Use the `ip nat inside source dynamic` command to map inside addresses to outside addresses

Notes:
- Dynamic NAT is commonly used to translate private IP addresses to public IP addresses
- It requires a public IP address for each NAT rule
- Dynamic NAT is not recommended for high traffic applications

Regular Dynamic NAT/PAT (Basic Internet Access)

- Use the `ip nat translate` command to map inside addresses to outside addresses
- Use the `ip nat inside source dynamic` command to map inside addresses to outside addresses

Notes:
- Dynamic NAT is commonly used to translate private IP addresses to public IP addresses
- It requires a public IP address for each NAT rule
- Dynamic NAT is not recommended for high traffic applications

Identity NAT/NAT Exemption/No-NAT (With Interface PAT)

- Use the `ip nat mac` command to define a MAC address
- Use the `ip nat inside source static` command to map inside addresses to outside addresses

Notes:
- Identity NAT is commonly used to translate private IP addresses to public IP addresses
- It requires a public IP address for each NAT rule
- Identity NAT is not recommended for high traffic applications

Useful Links and References

- Cisco Documentation
- Cisco Community
- Cisco Blog

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