

知 ComwareV7 FW带VPN实例的AFT典型配置 (V6访问V4)

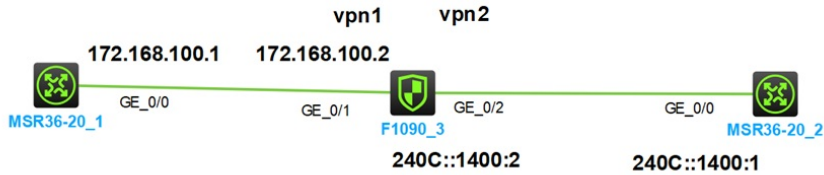
AFT 孔德飞 2024-01-19 发表

组网及说明

组网如下:

FW的g1/0/1属于vpn1, 对接ipv6网络, FW的g1/0/2属于vpn2,对接ipv6网络

需求是: MSR通过访问2012::172.168.100.1, 通过FW的AFT转换到V4侧, 源地址转换为172.168.100.3, 目的地址转换为172.168.100.1



配置步骤

MSR1的配置如下:

接口起IP地址

```
interface GigabitEthernet0/0
port link-mode route
combo enable copper
ip address 172.168.100.1 255.255.255.0
```

FW的配置如下:

```
ip vpn-instance vpn1
ip vpn-instance vpn2
```

配置IPV6到IPV4的目的地址转换

```
aft prefix-nat64 2012:: 96
```

配置IPV6到IPV4源地址转换地址池

```
aft address-group 1
address 172.168.100.3 172.168.100.3
```

配置IPV6到IPV4源地址转换

```
aft v6tov4 source prefix-nat64 2012:: 96 vpn-instance vpn2 address-group 1 vpn-instance vpn1
```

接口配置VPN实例, 起IP地址, 配置AFT

```
interface GigabitEthernet1/0/1
port link-mode route
combo enable copper
ip binding vpn-instance vpn1
ip address 172.168.100.2 255.255.255.0
aft enable
```

```
interface GigabitEthernet1/0/2
```

```
port link-mode route
combo enable copper
ip binding vpn-instance vpn2
aft enable
ipv6 address 240C::1400:2/96
```

MSR2的配置

```
interface GigabitEthernet0/0
port link-mode route
combo enable copper
ipv6 address 240C::1400:1/96
```

路由

```
ipv6 route-static 2012::96 240C::1400:2
```

配置完成之后，MSR2可以通过2012::172.178.100.1访问MSR1的172.168.100.1

```
<RT2>ping 2012::172.168.100.1
ping: Unknown host.
<RT2>ping ipv6 2012::172.168.100.1
Ping6(56 data bytes) 240C:0:FF14:101:100:: --> 2012::ACA8:6401, press CTRL-C
56 bytes from 2012::ACA8:6401, icmp_seq=0 hlim=254 time=0.944 ms
56 bytes from 2012::ACA8:6401, icmp_seq=1 hlim=254 time=0.760 ms
56 bytes from 2012::ACA8:6401, icmp_seq=2 hlim=254 time=0.757 ms
56 bytes from 2012::ACA8:6401, icmp_seq=3 hlim=254 time=0.848 ms
56 bytes from 2012::ACA8:6401, icmp_seq=4 hlim=254 time=0.718 ms

--- Ping6 statistics for 2012::172.168.100.1 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 0.718/0.805/0.944/0.081 ms
```

FW的AFT会话如下

```
[FW]display aft session ipv4 verbose
```

Slot 1:

Total sessions found: 0

```
[FW]display aft session ipv6 verbose
```

Slot 1:

Initiator:

```
Source IP/port: 172.168.100.3/2
Destination IP/port: 172.168.100.1/2048
DS-Lite tunnel peer: -
VPN instance/VLAN ID/Inline ID: vpn2/-/-
Protocol: ICMP(1)
Inbound interface: GigabitEthernet1/0/2
Source security zone: Local
```

Responder:

```
Source IP/port: 172.168.100.1/2
Destination IP/port: 172.168.100.3/0
DS-Lite tunnel peer: -
VPN instance/VLAN ID/Inline ID: vpn1/-/-
Protocol: ICMP(1)
Inbound interface: GigabitEthernet1/0/1
Source security zone: Trust
```

State: ICMP_REPLY

Application: ICMP

Rule ID: 1

Rule name: 1

Start time: 2024-01-19 12:49:23 TTL: 28s

Initiator->Responder: 5 packets 420 bytes

Responder->Initiator: 5 packets 420 bytes [FW]

[FW]

```
[FW]display aft session ipv6 v
```

```
[FW]display aft session ipv6 verbose
```

Slot 1:

Initiator:

```
Source IP/port: 240C::1400:1/10975
Destination IP/port: 2012::ACA8:6401/32768
VPN instance/VLAN ID/Inline ID: vpn2/-/-
Protocol: IPV6-ICMP(58)
Inbound interface: GigabitEthernet1/0/2
Source security zone: Untrust
```

Responder:

```
Source IP/port: 2012::ACA8:6401/10975
Destination IP/port: 240C::1400:1/33024
VPN instance/VLAN ID/Inline ID: vpn1/-/-
Protocol: IPV6-ICMP(58)
Inbound interface: GigabitEthernet1/0/1
```

Source security zone: Local
State: ICMPV6_REPLY
Application: ICMP
Rule ID: -/-
Rule name:
Start time: 2024-01-19 12:45:16 TTL: 14s
Initiator->Responder: 5 packets 520 bytes
Responder->Initiator: 5 packets 520 bytes

Total sessions found: 1

配置关键点

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配置IPv6到IPv4的目的地址转换
aft prefix-nat64 2012:: 96

配置IPv6到IPv4源地址转换地址池

aft address-group 1
address 172.168.100.3 172.168.100.3

配置IPv6到IPv4源地址转换

aft v6tov4 source prefix-nat64 2012:: 96 vpn-instance vpn2 address-group 1 vpn-instance vpn1