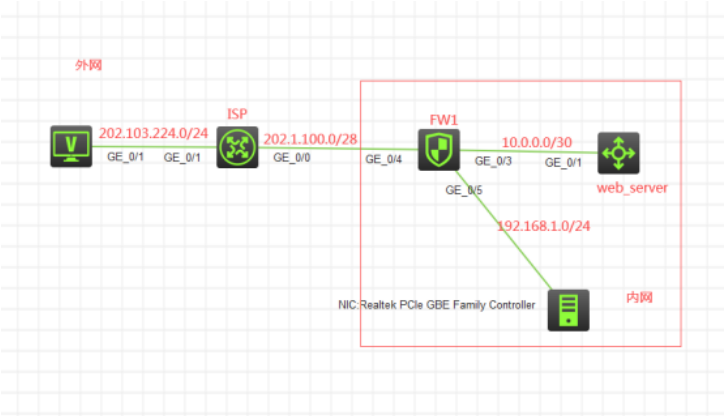
F1060 NAT回流典型组网配置案例2（有固定公网地址映射）

NAT H3C模拟器 **韦家宁** 2020-03-07 发表

组网及说明



组网说明：

本案例采用H3C HCL模拟器的F1060防火墙来模拟NAT回流的典型组网配置，内网和外网在网络拓扑图有了明确的标识，FW1作为内网的出口设备，不仅保护内网的安全，也提供地址转换的服务。内网仅申请了202.1.100.2-202.1.100.3这2个公网地址，其中202.1.100.2用于跟外网互联，且由于web_server要对外提供WEB服务，因此202.1.100.3的公网地址，由于内网的PC也需要使用外网地址访问内网的web服务器，所以要在FW1的内网口开启NAT回流的功能。

配置步骤

1、按照网络拓扑图正确配置IP地址

2、Web_server开启WEB功能，并创建相应账户及赋予权限

3、FW1配置NAT地址转换，并配置默认路由指向外网

4、FW1配置nat server，并发布内网的WEB服务器

5、FW1在各内网口开启NAT回流功能

配置关键点

Web_server:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname web_server
[web_server]int gi 1/0/1
[web_server-GigabitEthernet1/0/1]port link-mode route
[web_server-GigabitEthernet1/0/1]des <connect to FW1>
[web_server-GigabitEthernet1/0/1]ip address 10.0.0.2 30
[web_server-GigabitEthernet1/0/1]quit
[web_server]ip route-static 0.0.0.0 0.0.0.0 10.0.0.1
[web_server]ip http enable
[web_server]ip https enable
[web_server]local-user admin
New local user added.
[web_server-luser-manage-admin]password simple admin
[web_server-luser-manage-admin]service-type http https
[web_server-luser-manage-admin]authorization-attribute user-role network-admin
[web_server-luser-manage-admin]quit
[web_server]
```

ISP:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname ISP
[ISP]int gi 0/1
[ISP-GigabitEthernet0/1]ip address 202.103.224.254 24
[ISP-GigabitEthernet0/1]quit
[ISP]int gi 0/0
```

```
[ISP-GigabitEthernet0/0]des <connect to FW1>
[ISP-GigabitEthernet0/0]ip address 202.1.100.1 28
[ISP-GigabitEthernet0/0]quit
```

FW1:

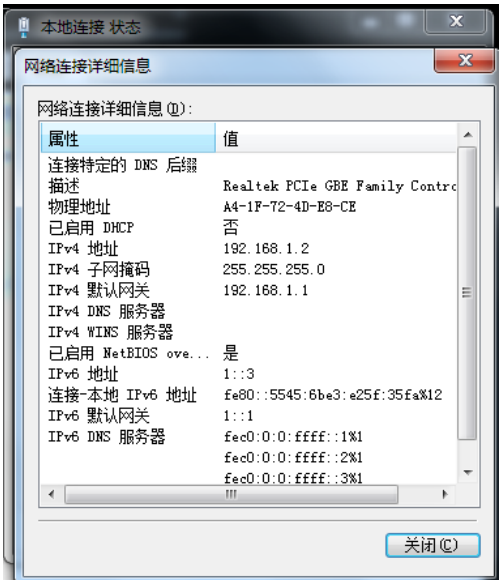
```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW1
[FW1]acl basic 2001
[FW1-acl-ipv4-basic-2001]rule 0 permit source any
[FW1-acl-ipv4-basic-2001]quit
[FW1]
[FW1]zone-pair security source trust destination untrust
[FW1-zone-pair-security-Trust-Untrust]packet-filter 2001
[FW1-zone-pair-security-Trust-Untrust]quit
[FW1]
[FW1]zone-pair security source untrust destination trust
[FW1-zone-pair-security-Untrust-Trust]packet-filter 2001
[FW1-zone-pair-security-Untrust-Trust]quit
[FW1]
[FW1]zone-pair security source trust destination local
[FW1-zone-pair-security-Trust-Local]packet-filter 2001
[FW1-zone-pair-security-Trust-Local]quit
[FW1]
[FW1]zone-pair security source local destination trust
[FW1-zone-pair-security-Local-Trust]packet-filter 2001
[FW1-zone-pair-security-Local-Trust]quit
[FW1]
[FW1]zone-pair security source untrust destination local
[FW1-zone-pair-security-Untrust-Local]packet-filter 2001
[FW1-zone-pair-security-Untrust-Local]quit
[FW1]
[FW1]zone-pair security source local destination untrust
[FW1-zone-pair-security-Local-Untrust]packet-filter 2001
[FW1-zone-pair-security-Local-Untrust]quit
[FW1]zone-pair security source trust destination trust
[FW1-zone-pair-security-Trust-Trust]packet-filter 2000
[FW1-zone-pair-security-Trust-Trust]quit
[FW1]int gi 1/0/3
[FW1-GigabitEthernet1/0/3]des <connect to web_server>
[FW1-GigabitEthernet1/0/3]ip address 10.0.0.1 30
[FW1-GigabitEthernet1/0/3]quit
[FW1]security-zone name Trust
[FW1-security-zone-Trust]import interface GigabitEthernet 1/0/3
[FW1-security-zone-Trust]quit
[FW1]int gi 1/0/5
[FW1-GigabitEthernet1/0/5]ip address 192.168.1.1 24
[FW1-GigabitEthernet1/0/5]quit
[FW1]security-zone name Trust
[FW1-security-zone-Trust]import interface GigabitEthernet 1/0/5
[FW1-security-zone-Trust]quit
```

FW1 NAT回流及NAT server关键配置点：

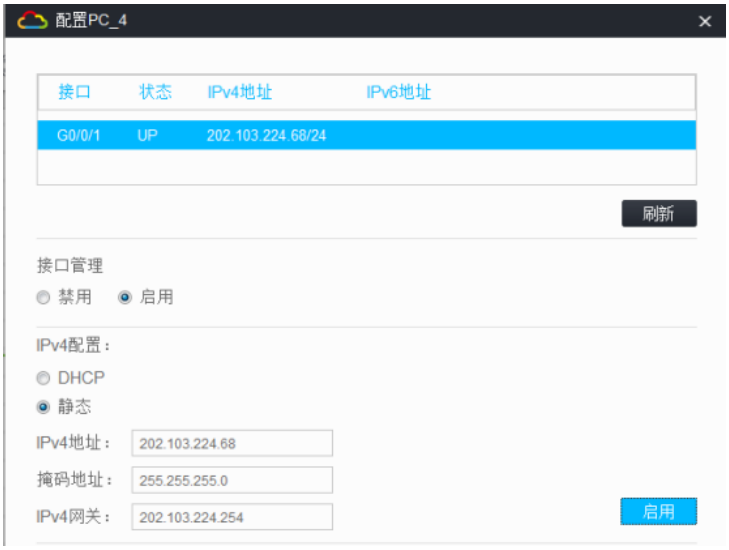
```
[FW1]acl basic 2000
[FW1-acl-ipv4-basic-2000]rule 0 permit source any
[FW1-acl-ipv4-basic-2000]quit
[FW1]int gi 1/0/4
[FW1-GigabitEthernet1/0/4]des <connect to ISP>
[FW1-GigabitEthernet1/0/4]ip address 202.1.100.2 28
[FW1-GigabitEthernet1/0/4]nat outbound 2000
[FW1-GigabitEthernet1/0/4]nat server protocol tcp global 202.1.100.3 80 inside 10.0.0.2 80
[FW1-GigabitEthernet1/0/4]nat server protocol tcp global 202.1.100.3 443 inside 10.0.0.2 443
```

```
[FW1-GigabitEthernet1/0/4]quit
[FW1]ip route-static 0.0.0.0 0.0.0.0 202.1.100.1
[FW1]security-zone name Untrust
[FW1-security-zone-Untrust]import interface GigabitEthernet 1/0/4
[FW1-security-zone-Untrust]quit
[FW1]int range gi 1/0/3 gi 1/0/5
[FW1-if-range]nat hairpin enable
[FW1-if-range]quit
```

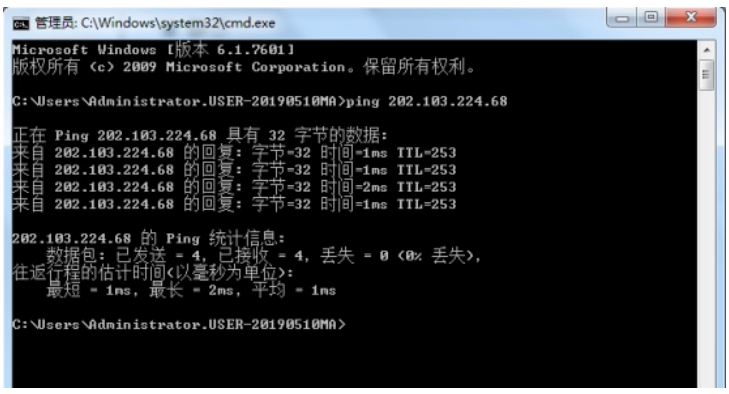
物理机填写IP地址：



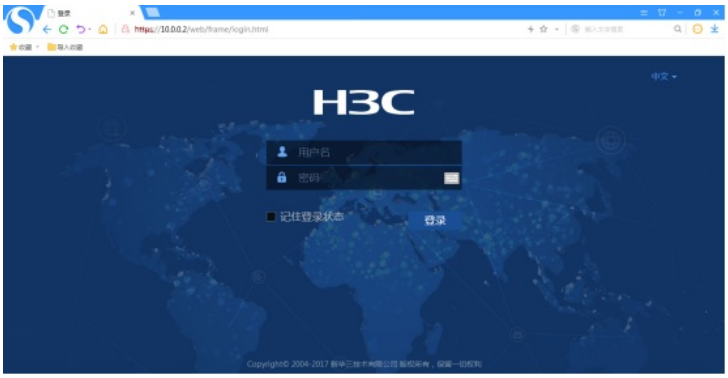
外网PC填写IP地址：



内网PC可以PING通外网PC：



内网PC可以使用内网地址登陆WEB服务器



内网PC也可以使用外网地址登陆web服务器：（由于在nat server，将web服务器映射到202.1.100.3，因此使用202.1.100.3来访问web服务器）

至此，F1060 NAT回流典型组网配置案例2（有固定公网IP转换）已完成！