🗩 EASY IP NAT典型组网配置案例

NAT H3C模拟器 **韦家宁** 2020-02-05 发表

组网及说明		
GE_0/1		
V 外网		
GE_0/0		
202.103.224.0/24		
GE_0(1 R1		
	内网	
7		
GE_5/0 GE_0/1		
VLAN 10 VLAN 20		
GE_0/1		

组网说明:本案例是采用H3C HCL模拟器来模拟搭建basic NAT的组网环境,内网和外网均以在网络 拓扑图中有了明确的标识,R1是某局点的内网设备,R1为出口设备,某局点仅申请了202.1.100.2的这 个公网地址,但是仅能作为互联外网接口使用,而且内网终端需要通过NAT地址转换来访问外网。PC-3为外网的服务器。本案例要求PC-4、PC-5能通过转换为202.1.100.2的这个公网地址来访问PC-3。

配置步骤

- 1、按照网络拓扑图正确配置IP地址
- 2、在R1配置NAT,实现地址转换
- 3、R1配置默认路由指向到外网
- 4、PC-4、PC-5能通过地址转换后PING通外网服务器PC-3

配置关键点

ISP: <H3C>sys

[H3C]sysname ISP

[ISP]int gi 0/1
[ISP-GigabitEthernet0/1]description <connect to R1>
[ISP-GigabitEthernet0/1]ip address 202.1.100.1 28
[ISP-GigabitEthernet0/1]quit
[ISP-GigabitEthernet0/1]quit
[ISP-GigabitEthernet0/0]description <connect to PC-3>
[ISP-GigabitEthernet0/0]ip address 202.103.224.254 24
[ISP-GigabitEthernet0/0]quit

R1:

<H3C>sys [H3C]sysname R1 [R1]vlan 10 [R1-vlan10]quit [R1]vlan 20 [R1-vlan20]quit [R1]int vlan 10 [R1-Vlan-interface10]ip address 192.168.10.1 24 [R1-Vlan-interface20]ip address 192.168.20.1 24 [R1-Vlan-interface20]ip address 192.168.20.1 24

[R1]int gi 5/0

[R1-GigabitEthernet5/0]port link-mode bridge

[R1-GigabitEthernet5/0]port link-type access [R1-GigabitEthernet5/0]port access vlan 10

[R1-GigabitEthernet5/0]quit

[R1]int gi 5/1

[R1-GigabitEthernet5/1]port link-mode bridge [R1-GigabitEthernet5/1]port link-type access [R1-GigabitEthernet5/1]port access vlan 20 [R1-GigabitEthernet5/1]quit

EASY IP NAT配置:

[R1]acl basic 2000 [R1-acl-ipv4-basic-2000]rule 0 permit source any [R1-acl-ipv4-basic-2000]quit

[R1]int gi 0/1

[R1-GigabitEthernet0/1]description <connect to ISP>

[R1-GigabitEthernet0/1]ip address 202.1.100.2 28

[R1-GigabitEthernet0/1]nat outbound 2000

[R1-GigabitEthernet0/1]quit

[R1]ip route-static 0.0.0.0 0.0.0.0 202.1.100.1

测试:

所有PC都填写上IP地址、子网掩码、默认网关

▲ 配置PC_4					×	
	接口	状态	IPv4地址	IPv6地址		
	G0/0/1	UP	192.168.10.2/24			
					刷新	
	接口管理					
	◎ 禁用 🔍	启用				
	IPv4配置:					
	DHCP					
<u> </u>	◎ 静态					
	IPv4地址:	192.168.	10.2			
	掩码地址:	255.255.	255.0			
	IPv4网关:	192.168.	10.1		启用	

🗅 配置PC_	5			
*	140 *	in addited	in. ciliida	
按口	17.25	IPV4AULAIL	IPVO退班	
G0/0/1	UP	192.168.20.2/24		
				刷新
接口管理				
◎ 禁用	◉ 启用			
IPv4配置:				
DHCP				
◎ 静态				
IPv4地址:	192.168	.20.2		
掩码地址:	255.255	.255.0		
IPv4网关:	192.168	.20.1		启用

\sim	配置PC_3					×
	接口	状态	IPv4地址	IPv6地址		
	G0/0/1	UP	202.103.224.68/24			
					刷新	
授	医口管理					
C)禁用 ◎)启用				
IF	∿4配置:					
C	DHCP					
۲)静念					
IF	∿4地址:	202.103.2	224.68			
捎	阉码地址:	255.255.2	255.0			
IF	⁰v4网关:	202.103.2	224.254		启用	

PC-4和PC-5能PING通PC-3





查看NAT的会话信息及转换情况:

[R1]dis nat session
Slot 0:
Initiator:
Source IP/port: 192.168.20.2/189
Destination IP/port: 202.103.224.68/2048
DS-Lite tunnel peer: -
VPN instance/VLAN ID/Inline ID: -/-/-
Protocol: ICMP(1)
Inbound interface: Vlan-interface20
Initiator:
Source IP/port: 192.168.10.2/193
Destination IP/port: 202.103.224.68/2048
DS-Lite tunnel peer: -
VPN instance/VLAN ID/Inline ID: -/-/-
Protocol: ICMP(1)
Inbound interface: Vlan-interface10
Total sessions found: 2
[R1]



至此, EASY IP NAT典型组网配置案例已完成!