

在PIX上配置PPPOEClient与PPPOESERVER通信Cisco认证考试
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https://www.100test.com/kao_ti2020/571/2021_2022__E5_9C_A8PIX_E4_B8_8A_E9_c101_571866.htm 拓扑如下：1,实验说明：

ü Cisco 1721来模拟PPPOE SERVER ü PIX501来模拟PPPOE Client 2,实验过程 配置CISCO 1721为PPPOE SERVER //首先底层配置,这没什么说的，大家已经非常熟悉了~~

```
Router(config)#no ip domain-lookup Router(config)#line console 0
Router(config-line)#exec-timeout 0 0 Router(config-line)#logg syn
Router(config-line)#host PPPOE_SERVER
```

```
PPPOE_SERVER(config)#int e0/0 PPPOE_SERVER(config-if)#ip
add 192.168.0.1 255.255.255.0 PPPOE_SERVER(config-if)#no sh
PPPOE_SERVER(config-if)#pppoe enable //接口下开启PPPOE
会话功能 PPPOE_SERVER(config-if)#exit
```

```
PPPOE_SERVER(config)#vpdn enable //全局开启VPDN服务
PPPOE_SERVER(config)#vpdn-group PPPOE //创建VPDN拨号
组，此处我设置的名称为PPPOE，注意这里创建的组名要
和PIX上启用的VPDN组名要一致，不然pppoe session会话失
败 PPPOE_SERVER(config-vpdn)#accept-dialin //接受拨号请求
PPPOE_SER(config-vpdn-acc-in)#protocol pppoe //指定会话协
议为pppoe PPPOE_SER(config-vpdn-acc-in)#virtual-template 1 //
创建虚模板 1，表示第几个虚模板，创建虚模板之后，会立
即看见Virtual-Access1, changed state to up
```

```
PPPOE_SER(config-vpdn-acc-in)#end *Mar 1 00:06:27.707:
%LINK-3-UPDOWN: Interface Virtual-Access1, changed state to
up *Mar 1 00:06:28.707: %LINEPROTO-5-UPDOWN: Line
```

protocol on Interface Virtual-Access1, changed state to up
PPPOE_SERVER#conf t Enter configuration commands, one per
line. End with CNTL/Z. PPPOE_SERVER(config)#int
virtual-template 1 //进入虚模板1 PPPOE_SERVER(config-if)#ip
unnumbered e0/0 //此处不要给虚模板配置IP地址，建议使用ip
unnumbered 向物理接口E0/0借用，因为E0/0接口为outside接
口，已开启pppoe enable PPPOE_SERVER(config-if)#ppp
authentication pap //指定ppp认证方式为pap，采用认证方式
为PAP，认证过程会话用户名和密码为明文，你可以采
用chap PPPOE_SERVER(config-if)#peer default ip address pool
ADSL //指定地址池的名称为ADSL，可以随意指定名称，但
要和下面的地址池名称一致 PPPOE_SERVER(config-if)#exit
PPPOE_SERVER(config)#ip local pool ADSL 200.0.0.1 200.0.0.10
//指定地址池的地址范围，这个地址范围必须是连续的
PPPOE_SERVER(config)#username wangwanli password
wangwanli //指定pppoe拨号的用户名和密码
PPPOE_SERVER(config)#end 到此PPPOE_SERVER上配置已全部
完成 PIX上进行配置 pixfirewall<cr>. pixfirewall# show ip
address outside pppoe //PIX上完成拨号之后，查看得到的IP地
址 PPPoE Assigned IP addr: 200.0.0.1 255.255.255.255 on Interface:
outside Remote IP addr: 192.168.0.1 pixfirewall# show route Codes:
C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP D -
EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area N1 -
OSPF NSSA external type 1, N2 - OSPF NSSA external type 2 E1 -
OSPF external type 1, E2 - OSPF external type 2, E - EGP i - IS-IS,
L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area * - candidate

default, U - per-user static route, o - ODR P - periodic downloaded static route Gateway of last resort is 192.168.0.1 to network 0.0.0.0 S* 0.0.0.0 0.0.0.0 [1/0] via 192.168.0.1, outside //查看路由表自动生成一条缺省路由 pixfirewall# show interface ip brief

Interface	IP-Address	OK?	Method	Status	Protocol
Ethernet0	unassigned	YES	unset	administratively down	up
Ethernet1	200.0.0.1	YES	manual	up	up
Ethernet2	unassigned	YES	unset	up	up
Ethernet3	unassigned	YES	unset	administratively down	up

pixfirewall# ping 192.168.0.1 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to 192.168.0.1, timeout is 2 seconds: !!!!! Success rate is 100 percent (5/5), round-trip min/avg/max = 10/20/50 ms //通过ping测试PIX与PPPOE SERVER是可以正常通信的 pixfirewall# sh ip //PIX上接口IP地址信息

System IP Addresses:	Interface	Name	IP address	Subnet mask	Method
Ethernet1	outside	200.0.0.1	255.255.255.255	manual	

Current IP Addresses:	Interface	Name	IP address	Subnet mask	Method
Ethernet1	outside	200.0.0.1	255.255.255.255	manua	

PPPOE_SERVER#show pppoe session all //查看pppoe session 所有会话详细信息 Total PPPoE sessions 1 PPPoE Session Information session id: 1 local MAC address: cc9f.0788.0000, remote MAC address: 00aa.0001.0102 virtual access interface: Vi1.1, outgoing interface: Et0/0 117 packets sent, 117 received 1915 bytes sent, 1934 received 现在我把PIX上的E1接口重新关闭之后，再打开，再来观察一下PIX上的pppoe的会话过程与PPPOE SERVER上的看到的pppoe会话的四个过程，PADI---PADO-PADR-PADS 四个过程 pixfirewall# conf t pixfirewall(config)# int e1 pixfirewall(config-if)# sh PPPoE: Shutting

down client session PPPoE: padi timer expired PPPoE: padi timer
expired pixfirewall(config-if)# no sh pixfirewall# PPPoE:
send_padi:(Snd) Dest:ffff.ffff.ffff Src:00aa.0001.0102
Type:0x8863=PPPoE-Discovery. 100Test 下载频道开通，各类考
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