

当RADIUS验证和授权配置时，远程访问VPN不工作

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简介

当两认证和授权配置时，本文描述扩展认证的行为VPN用户的。

先决条件

要求

Cisco 建议您了解以下主题：

- 验证、授权和记帐 (AAA)
- 远程访问 VPN

使用的组件

本文档中的信息根据思科聚合服务路由器(ASR)1000运行Cisco IOS XE软件的系列。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

问题

VPN用户配置为了由RADIUS服务器验证和授权。在ASR的配置显示此处：

```
aaa group server radius ACS-Rad
server-private 10.88.171.27 key cisco123
ip vrf forwarding Mgmt-intf
aaa group server tacacs+ ACS-Tac
server-private 10.88.171.27 key cisco123
ip vrf forwarding Mgmt-intf
aaa authentication login VPN_Client group ACS-Rad
aaa authentication login login_local local
aaa authorization network VPN_Client group ACS-Rad
aaa authorization network login_local local
aaa accounting network VPN_Client start-stop group ACS-Rad
aaa accounting network login_local start-stop group ACS-Rad
aaa session-id common
```

然而，每当您设法验证，您为您的凭证从未得到提示。在客户端，此错误消息在日志消息被看到：

```
Unable to establish Phase 1 SA with server "X.X.X.X" because of
"DEL_REASON_PEER_NOT_RESPONDING"
```

在ASR的调试表明VPN组名称使用作为用户名授权尝试。

```
Sep 26 20:01:49.298: RADIUS(000025EA): Sending a IPv4 Radius Packet
Sep 26 20:01:49.298: RADIUS(000025EA): Send Access-Request to X.X.X.X id
1645/88,len 123
Sep 26 20:01:49.298: RADIUS: authenticator 0B 18 41 30 23 35 91 D5 - C3 DE 78
4E BB AC 30 4C
Sep 26 20:01:49.298: RADIUS: User-Name [1] 19 "vpnclient.cisco.com"
Sep 26 20:01:49.298: RADIUS: User-Password [2] 18 *
Sep 26 20:01:49.298: RADIUS: Calling-Station-Id [31] 16 "X.X.X.X"
Sep 26 20:01:49.298: RADIUS: NAS-Port-Type [61] 6 Virtual [5]
Sep 26 20:01:49.298: RADIUS: NAS-Port [5] 6 0
Sep 26 20:01:49.299: RADIUS: NAS-Port-Id [87] 16 "X.X.X.X"
Sep 26 20:01:49.299: RADIUS: Service-Type [6] 6 Outbound [5]
Sep 26 20:01:49.299: RADIUS: NAS-IP-Address [4] 6 192.168.0.55
Sep 26 20:01:49.299: RADIUS: Acct-Session-Id [44] 10 "00002CD6"
Sep 26 20:01:49.299: RADIUS(000025EA): Started 5 sec timeout
Sep 26 20:01:49.326: RADIUS: Received from id 1645/88 X.X.X.X:1812, Access-Accept,
len 26
Sep 26 20:01:49.326: RADIUS: authenticator D3 9D 20 7E 09 89 68 BD - 1A DF A3
B6 6E 25 8D 77
Sep 26 20:01:49.326: RADIUS: Service-Type [6] 6 Framed [2]
Sep 26 20:01:49.326: RADIUS(000025EA): Received from id 1645/88
Sep 26
iacc02.crt#20:01:49.326: ISAKMP:(0):ISAKMP/tunnel: received callback from AAA
Sep 26 20:01:49.326: ISAKMP/tunnel: received tunnel atts
Sep 26 20:01:49.326: ISAKMP:Error - skey id.
```

注意：然而，当本地授权配置时，一切良好工作。

解决方案

报告的行为预计而不是bug。远程访问VPN有两独立的验证processess：

1. 用户连接的通道的预共享密钥验证。

2. 验证个人用户的XAUTH。

在预共享密钥验证在阶段1之后，成功XAUTH是相位1.5并且发生。原因您不能发现用户提示输入密码是，因为阶段1未完成。在调试发送的用户名实际上是为阶段1预共享密钥验证。

本地授权与RADIUS授权

当本地authoriation配置时，VPN头端拾起关键值配置在组配置下为了完成阶段1。这允许相位1完成，因此路由器能继续到XAUTH：

```
*Dec 26 12:42:13.926: ISAKMP:(0):ISAKMP/tunnel: setting up tunnel vpnclient
pw request
*Dec 26 12:42:13.926: AAA/AUTHOR (0x12): Pick method list 'login_local'
*Dec 26 12:42:13.926: ISAKMP:(0):ISAKMP/tunnel: Tunnel vpnclient PW Request
successfully sent to AAA
*Dec 26 12:42:13.926: ISAKMP:(0):Input = IKE_MESG_FROM_PEER, IKE_AM_EXCH
*Dec 26 12:42:13.926: ISAKMP:(0):Old State = IKE_READY New State =
IKE_R_AM_AAA_AWAIT

*Dec 26 12:42:13.927: ISAKMP:(0):ISAKMP/tunnel: received callback from AAA
AAA/AUTHOR/IKE: Processing AV tunnel-password
AAA/AUTHOR/IKE: Processing AV default-domain
AAA/AUTHOR/IKE: Processing AV addr-pool
AAA/AUTHOR/IKE: Processing AV dns-servers
AAA/AUTHOR/IKE: Processing AV wins-servers
AAA/AUTHOR/IKE: Processing AV route-metric
AAA/AUTHOR/IKE: Processing AV max-users
AAA/AUTHOR/IKE: Processing AV max-logins
AAA/AUTHOR/IKE: Processing AV netmask
*Dec 26 12:42:13.927: ISAKMP/tunnel: received tunnel atts
*Dec 26 12:42:13.927: ISAKMP:(35002): constructed NAT-T vendor-02 ID
*Dec 26 12:42:13.927: ISAKMP:(35002):SA is doing pre-shared key authentication
plus XAUTH using id type ID_IPV4_ADDR
*Dec 26 12:42:13.927: ISAKMP (35002): ID payload
next-payload : 10
type : 1
address : 172.16.161.24
protocol : 0
port : 0
length : 12
*Dec 26 12:42:13.927: ISAKMP:(35002):Total payload length: 12
*Dec 26 12:42:13.927: ISAKMP:(35002): sending packet to X.X.X.X my_port 500
peer_port 65328 (R) AG_INIT_EXCH
*Dec 26 12:42:13.927: ISAKMP:(35002):Sending an IKE IPv4 Packet.
*Dec 26 12:42:13.927: ISAKMP:(35002):Input = IKE_MESG_FROM_AAA, PRESHARED_KEY_REPLY
*Dec 26 12:42:13.927: ISAKMP:(35002):Old State = IKE_R_AM_AAA_AWAIT New State =
IKE_R_AM2

*Dec 26 12:42:14.017: ISAKMP (35002): received packet from X.X.X.X dport 4500 sport
59464 Mgmt-intf (R) AG_INIT_EXCH
*Dec 26 12:42:14.017: ISAKMP:(35002): processing HASH payload. message ID = 0
*Dec 26 12:42:14.017: ISAKMP:(35002): processing NOTIFY INITIAL_CONTACT protocol 1
spi 0, message ID = 0, sa = 0x7F7796C1DDC0
*Dec 26 12:42:14.018: ISAKMP:received payload type 20
*Dec 26 12:42:14.018: ISAKMP (35002): His hash no match - this node outside NAT
*Dec 26 12:42:14.018: ISAKMP:received payload type 20
*Dec 26 12:42:14.018: ISAKMP (35002): His hash no match - this node outside NAT
*Dec 26 12:42:14.018: ISAKMP:(35002):SA authentication status:
authenticated
*Dec 26 12:42:14.018: ISAKMP:(35002):SA has been authenticated with X.X.X.X
*Dec 26 12:42:14.018: ISAKMP:(35002):Detected port,floating to port = 59464
```

*Dec 26 12:42:14.018: ISAKMP: Trying to find existing peer
X.X.X.X/X.X.X.X/59464/Outside
*Dec 26 12:42:14.018: ISAKMP:(35002):SA authentication status:
authenticated

*Dec 26 12:42:14.018: ISAKMP AAA: Profile vpnclient.cisco.com in use with AAA list
VPN_Client for peer X.X.X.X
*Dec 26 12:42:14.018: ISAKMP AAA: No peer record for address X.X.X.X, port 59464.
Create Accounting Record
*Dec 26 12:42:14.018: ISAKMP: Attempting to insert peer index node : 0x2
*Dec 26 12:42:14.018: ISAKMP AAA: Create Accounting Record 0x7F779645B5E0 for peer
X.X.X.X/59464 - peer-index 0x2
*Dec 26 12:42:14.018: ISAKMP AAA: NAS Port Id is already set to X.X.X.X
*Dec 26 12:42:14.018: ISAKMP AAA: crypto_ikmp_aaa_acct_rec_create: pki_sd 0

*Dec 26 12:42:14.018: ISAKMP:(35002):Input = IKE_MSG_FROM_PEER, IKE_AM_EXCH
*Dec 26 12:42:14.018: ISAKMP:(35002):Old State = IKE_R_AM2 New State =
IKE_P1_COMPLETE

*Dec 26 12:42:14.018: ISAKMP:(35002):Need XAUTH
*Dec 26 12:42:14.018: ISAKMP: set new node 2793554424 to CONF_XAUTH
*Dec 26 12:42:14.018: ISAKMP/xauth: request attribute XAUTH_USER_NAME_V2
*Dec 26 12:42:14.018: ISAKMP/xauth: request attribute XAUTH_USER_PASSWORD_V2
*Dec 26 12:42:14.018: ISAKMP:(35002): initiating peer config to X.X.X.X.
ID = 2793554424
*Dec 26 12:42:14.018: ISAKMP:(35002): sending packet to X.X.X.X my_port 4500
peer_port 59464 (R) CONF_XAUTH
*Dec 26 12:42:14.018: ISAKMP:(35002):Sending an IKE IPv4 Packet.
*Dec 26 12:42:14.018: ISAKMP:(35002):Input = IKE_MSG_INTERNAL,
IKE_PHASE1_COMPLETE
*Dec 26 12:42:14.018: ISAKMP:(35002):Old State = IKE_P1_COMPLETE New State =
IKE_XAUTH_REQ_SENT

*Dec 26 12:42:21.572: ISAKMP (35002): received packet from X.X.X.X dport 4500
sport 59464 Mgmt-intf (R) CONF_XAUTH
*Dec 26 12:42:21.572: ISAKMP:(35002):processing transaction payload from
X.X.X.X. message ID = 2793554424
*Dec 26 12:42:21.572: ISAKMP: Config payload REPLY
*Dec 26 12:42:21.572: ISAKMP/xauth: reply attribute XAUTH_USER_NAME_V2
*Dec 26 12:42:21.572: ISAKMP/xauth: reply attribute XAUTH_USER_PASSWORD_V2
*Dec 26 12:42:21.572: ISAKMP AAA: NAS Port Id is already set to X.X.X.X
*Dec 26 12:42:21.572: ISAKMP/Authen: unique id = 19
*Dec 26 12:42:21.572: ISAKMP:(35002):AAA Authen: setting up authen_request
*Dec 26 12:42:21.572: AAA/AUTHEN/LOGIN (00000013): Pick method list 'VPN_Client'
*Dec 26 12:42:21.572: ISAKMP:(35002):AAA Authen: Successfully sent authen
info to AAA

*Dec 26 12:42:21.572: ISAKMP:(35002):deleting node 2793554424 error FALSE
reason "Done with xauth request/reply exchange"
*Dec 26 12:42:21.572: ISAKMP:(35002):Input = IKE_MSG_FROM_PEER, IKE_CFG_REPLY
*Dec 26 12:42:21.572: ISAKMP:(35002):Old State = IKE_XAUTH_REQ_SENT New
State = IKE_XAUTH_AAA_CONT_LOGIN_AWAIT

*Dec 26 12:42:21.573: RADIUS/ENCODE(00000013):Orig. component type = VPN IPSEC
*Dec 26 12:42:21.573: RADIUS: AAA Unsupported Attr: interface [221]
13 32631
*Dec 26 12:42:21.573: RADIUS/ENCODE(00000013): dropping service type,
"radius-server attribute 6 on-for-login-auth" is off
*Dec 26 12:42:21.573: RADIUS(00000013): Config NAS IP: 0.0.0.0
*Dec 26 12:42:21.573: RADIUS(00000013): Config NAS IPv6: ::
*Dec 26 12:42:21.573: Getting session id for EXEC(00000013) : db=7F7792DDEEAB8
*Dec 26 12:42:21.573: RADIUS/ENCODE(00000013): acct_session_id: 8
*Dec 26 12:42:21.573: RADIUS(00000013): sending
*Dec 26 12:42:21.573: RADIUS/ENCODE: Best Local IP-Address X.X.X.X for

Radius-Server X.X.X.X

```
*Dec 26 12:42:21.573: RADIUS(00000013): Sending a IPv4 Radius Packet
*Dec 26 12:42:21.573: RADIUS(00000013): Send Access-Request to 10.88.171.27:1645
id 1645/1,len 95
*Dec 26 12:42:21.573: RADIUS: authenticator B6 8C 79 D9 91 0C 79 50 - CB B0
2A 87 2A 61 03 E8
*Dec 26 12:42:21.573: RADIUS: User-Name [1] 10 "vpnclient-user"
*Dec 26 12:42:21.573: RADIUS: User-Password [2] 18 *
*Dec 26 12:42:21.573: RADIUS: Calling-Station-Id [31] 14 "X.X.X.X"
*Dec 26 12:42:21.573: RADIUS: NAS-Port-Type [61] 6 Virtual [5]
*Dec 26 12:42:21.573: RADIUS: NAS-Port [5] 6 0
*Dec 26 12:42:21.573: RADIUS: NAS-Port-Id [87] 15 "X.X.X.X"
*Dec 26 12:42:21.573: RADIUS: NAS-IP-Address [4] 6 X.X.X.X
*Dec 26 12:42:21.573: RADIUS(00000013): Started 5 sec timeout
*Dec 26 12:42:21.671: RADIUS: Received from id 1645/1 X.X.X.X:1645, Access-Accept,
len 56
*Dec 26 12:42:21.671: RADIUS: authenticator E7 C1 B1 3D 04 59 48 22 - 4B 80 9D
1A 5E CA 0A A6
*Dec 26 12:42:21.671: RADIUS: User-Name [1] 10 "vpnclient-user"
*Dec 26 12:42:21.671: RADIUS: Class [25] 26
*Dec 26 12:42:21.671: RADIUS: 43 41 43 53 3A 41 43 53 2D 35 78 2F 31 37 33 32
[CACS:ACS-5x/1732]
*Dec 26 12:42:21.671: RADIUS: 37 32 35 30 33 2F 31 34 [ 72503/14]
*Dec 26 12:42:21.671: RADIUS(00000013): Received from id 1645/1
*Dec 26 12:42:21.672: ISAKMP:(35002):ISAKMP/author: Class attribute (len=24)
'CACS:ACS-5x/173272503/14'
*Dec 26 12:42:21.672: ISAKMP:(35002):AAA Authen: No group atts added
*Dec 26 12:42:21.672: ISAKMP: set new node 1771945814 to CONF_XAUTH
*Dec 26 12:42:21.672: ISAKMP:(35002): initiating peer config to X.X.X.X. ID =
1771945814
*Dec 26 12:42:21.672: ISAKMP:(35002): sending packet to X.X.X.X my_port 4500
peer_port 59464 (R) CONF_XAUTH
*Dec 26 12:42:21.672: ISAKMP:(35002):Sending an IKE IPv4 Packet.
*Dec 26 12:42:21.672: ISAKMP:(35002):Input = IKE_MESG_FROM_AAA,
IKE_AAA_CONT_LOGIN
*Dec 26 12:42:21.672: ISAKMP:(35002):Old State = IKE_XAUTH_AAA_CONT_LOGIN_AWAIT
New State = IKE_XAUTH_SET_SENT

*Dec 26 12:42:21.759: ISAKMP (35002): received packet from X.X.X.X dport 4500 sport
59464 Mgmt-intf (R) CONF_XAUTH
*Dec 26 12:42:21.759: ISAKMP:(35002):processing transaction payload from X.X.X.X.
message ID = 1771945814
*Dec 26 12:42:21.759: ISAKMP: Config payload ACK
*Dec 26 12:42:21.759: ISAKMP:(35002): (blank) XAUTH ACK Processed
*Dec 26 12:42:21.759: ISAKMP:(35002):deleting node 1771945814 error FALSE reason
"Transaction mode done"
*Dec 26 12:42:21.759: ISAKMP:(35002):Talking to a Unity Client
*Dec 26 12:42:21.759: ISAKMP:(35002):Input = IKE_MESG_FROM_PEER, IKE_CFG_ACK
*Dec 26 12:42:21.759: ISAKMP:(35002):Old State = IKE_XAUTH_SET_SENT New State =
IKE_P1_COMPLETE

*Dec 26 12:42:21.759: ISAKMP:(35002):Input = IKE_MESG_INTERNAL, IKE_PHASE1_COMPLETE
*Dec 26 12:42:21.759: ISAKMP:(35002):Old State = IKE_P1_COMPLETE New State =
IKE_P1_COMPLETE

*Dec 26 12:42:21.763: ISAKMP (35002): received packet from X.X.X.X dport 4500 sport
59464 Mgmt-intf (R) QM_IDLE
*Dec 26 12:42:21.763: ISAKMP: set new node 3504137478 to QM_IDLE
*Dec 26 12:42:21.763: ISAKMP:(35002):processing transaction payload from X.X.X.X.
message ID = 3504137478
*Dec 26 12:42:21.763: ISAKMP: Config payload REQUEST
*Dec 26 12:42:21.763: ISAKMP:(35002):checking request:
*Dec 26 12:42:21.763: ISAKMP: IP4_ADDRESS
*Dec 26 12:42:21.763: ISAKMP: IP4_NETMASK
```

```
*Dec 26 12:42:21.763: ISAKMP: IP4_DNS
*Dec 26 12:42:21.763: ISAKMP: IP4_NBNS
*Dec 26 12:42:21.763: ISAKMP: ADDRESS_EXPIRY
*Dec 26 12:42:21.763: ISAKMP: MODECFG_BANNER
*Dec 26 12:42:21.763: ISAKMP: MODECFG_SAVEPWD
*Dec 26 12:42:21.763: ISAKMP: DEFAULT_DOMAIN
*Dec 26 12:42:21.763: ISAKMP: SPLIT_INCLUDE
*Dec 26 12:42:21.763: ISAKMP: SPLIT_DNS
*Dec 26 12:42:21.763: ISAKMP: PFS
*Dec 26 12:42:21.763: ISAKMP: MODECFG_BROWSER_PROXY
*Dec 26 12:42:21.763: ISAKMP: BACKUP_SERVER
*Dec 26 12:42:21.763: ISAKMP: MODECFG_SMARTCARD_REMOVAL_DISCONNECT
*Dec 26 12:42:21.763: ISAKMP: APPLICATION_VERSION
*Dec 26 12:42:21.763: ISAKMP: Client Version is : Cisco Systems VPN Client
5.0.07.0440:WinNTp
*Dec 26 12:42:21.763: ISAKMP: FW_RECORD
*Dec 26 12:42:21.763: ISAKMP: MODECFG_HOSTNAME
*Dec 26 12:42:21.763: ISAKMP:(35002):ISAKMP/author: setting up the authorization
request for vpnclient
*Dec 26 12:42:21.763: AAA/AUTHOR (0x13): Pick method list 'login_local'
*Dec 26 12:42:21.763: ISAKMP/author: Author request for group vpnclientsuccessfully
sent to AAA
*Dec 26 12:42:21.763: ISAKMP:(35002):Input = IKE_MESG_FROM_PEER, IKE_CFG_REQUEST
*Dec 26 12:42:21.763: ISAKMP:(35002):Old State = IKE_P1_COMPLETE New State =
IKE_CONFIG_AUTHOR_AAA_AWAIT

*Dec 26 12:42:21.764: ISAKMP:(0):ISAKMP/author: received callback from AAA
AAA/AUTHOR/IKE: Processing AV tunnel-password
AAA/AUTHOR/IKE: Processing AV default-domain
AAA/AUTHOR/IKE: Processing AV addr-pool
AAA/AUTHOR/IKE: Processing AV dns-servers
AAA/AUTHOR/IKE: Processing AV wins-servers
*Dec 26 12:42:21.764:
AAA/AUTHOR/IKE: no WINS addresses
AAA/AUTHOR/IKE: Processing AV route-metric
AAA/AUTHOR/IKE: Processing AV max-users
AAA/AUTHOR/IKE: Processing AV max-logins
AAA/AUTHOR/IKE: Processing AV netmask
*Dec 26 12:42:21.764: ISAKMP:(35002):ISAKMP/author: No Class attributes
*Dec 26 12:42:21.764: ISAKMP:(35002):attributes sent in message:
*Dec 26 12:42:21.764: Address: 0.2.0.0
*Dec 26 12:42:21.766: ISAKMP:(35002):allocating address X.X.X.X
*Dec 26 12:42:21.766: ISAKMP: Sending private address: X.X.X.X
*Dec 26 12:42:21.766: ISAKMP: Sending subnet mask: 255.255.255.0
*Dec 26 12:42:21.766: ISAKMP: Sending IP4_DNS server address: X.X.X.X
*Dec 26 12:42:21.766: ISAKMP: Sending ADDRESS_EXPIRY seconds left to use the
address: 86392
*Dec 26 12:42:21.766: ISAKMP: Sending save password reply value 0
*Dec 26 12:42:21.766: ISAKMP: Sending DEFAULT_DOMAIN default domain name:
vpnclient.cisco.com
*Dec 26 12:42:21.766: ISAKMP: Sending smartcard_removal_disconnect reply
value 0
*Dec 26 12:42:21.766: ISAKMP: Sending APPLICATION_VERSION string: Cisco IOS Software,
IOS-XE Software (X86_64_LINUX_IOSD-ADVENTERPRISEK9-M), Version 15.2(4)S,
RELEASE SOFTWARE (fc4)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2012 by Cisco Systems, Inc.
Compiled Mon 23-Jul-12 20:02 by mcpre
*Dec 26 12:42:21.766: ISAKMP (35002): Unknown Attr: MODECFG_HOSTNAME (0x700A)
*Dec 26 12:42:21.766: ISAKMP:(35002): responding to peer config from 72.163.84.76.
ID = 3504137478
*Dec 26 12:42:21.766: ISAKMP: Marking node 3504137478 for late deletion
*Dec 26 12:42:21.766: ISAKMP:(35002): sending packet to X.X.X.X my_port 4500 peer_port
59464 (R) CONF_ADDR
```

```
*Dec 26 12:42:21.766: ISAKMP:(35002):Sending an IKE IPv4 Packet.
*Dec 26 12:42:21.766: ISAKMP:(35002):Talking to a Unity Client
*Dec 26 12:42:21.766: ISAKMP:(35002):Input = IKE_MSG_FROM_AAA, IKE_AAA_GROUP_ATTR
*Dec 26 12:42:21.766: ISAKMP:(35002):Old State = IKE_CONFIG_AUTHOR_AAA_AWAIT New
State = IKE_P1_COMPLETE

*Dec 26 12:42:21.766: ISAKMP:FSM error - Message from AAA grp/user.

*Dec 26 12:42:21.766: ISAKMP:(35002):Input = IKE_MSG_INTERNAL, IKE_PHASE1_COMPLETE
*Dec 26 12:42:21.766: ISAKMP:(35002):Old State = IKE_P1_COMPLETE New State =
IKE_P1_COMPLETE
```

当路由器配置授权RADIUS服务器时，不工作，因为为了获得密钥(预共享验证)，必须执行访问请求查询到RADIUS服务器。然而，访问请求查询要求将发送的用户名对RADIUSA，并且，因为XAUTH没有执行，不能使用客户端用户用户名。在这种情况下，它使用组名作为用户名。然而，因为RADIUS服务器未由该ID设置验证任何用户，它拒绝请求。因此，阶段1从未完成，并且从未提示用户输入凭证。

工作配置

路由器配置

这是路由器的配置。

```
aaa group server radius Radius-Server
server-private X.X.X.X auth-port 1812 acct-port 1813 key 7 <removed>
```

```
aaa authentication login VPN_Client group Radius-Server
aaa authorization network VPN_Client Radius-Server
aaa accounting network VPN_Client start-stop group Radius-Server
```

```
crypto isakmp policy 10
encr 3des
authentication pre-share
group 2
```

```
crypto isakmp client configuration group vpnclient
key <removed>
dns x.x.x.x
wins x.x.x.x
domain cisco.com
pool VPN_Pool
acl 101
group-lock
```

```
crypto isakmp profile vpnclient.cisco.com
match identity group vpnclinet
client authentication list VPN_Client
isakmp authorization list VPN_Client
client configuration address respond
accounting VPN_Client
```

```
crypto ipsec transform-set TRANS-DES esp-des esp-md5-hmac
mode tunnel
```

```
crypto dynamic-map DYN-MAP 10
set transform-set TRANS-DES
set isakmp-profile vpnclient.cisco.com
reverse-route
```

```
crypto map VPN local-address TenGigabitEthernet 0/0/0
crypto map VPN 10 ipsec-isakmp dynamic DYN-MAP
```

```
interface TenGigabitEthernet0/0/0
ip address X.X.X.X 255.255.255.0
crypto map VPN
```

RADIUS 服务器配置

完成这些步骤为了配置RADIUS服务器。

1. 配置组名用户：

The screenshot shows a configuration page for a RADIUS user. The 'General' section includes fields for Name (vpnclient.cisco.com), Status (Enabled), Description (Profile por VPN Clients), and Identity Group (All Groups). The 'Password Information' section has fields for Password and Confirm Password, with a requirement to contain 4-32 characters. The 'Enable Password Information' section has fields for Enable Password and Confirm Password. The 'User Information' section has a field for ACS-RESERVED-Never-Expired (False). A legend indicates that orange icons represent required fields.

2. 配置授权配置文件为了给所有属性值(AV)对：

The screenshot shows the 'RADIUS Attributes' tab in the configuration page. It displays the Name (vpnclient.cisco.com) and Description (Profile por VPN Clients) fields. A legend indicates that orange icons represent required fields.

General | Common Tasks | **RADIUS Attributes**

Common Tasks Attributes

Attribute	Type	Value

Manually Entered

Attribute	Type	Value
CVPN3000/ASA/PIX7.x-IPSec-Authentication	Enumeration	Internal
CVPN3000/ASA/PIX7.x-Group-Based-Address	String	VPN_Pool
CVPN3000/ASA/PIX7.x-Access-List-Inbound	String	101
CVPN3000/ASA/PIX7.x-IPSec-Group-Name	String	vpnclient.cisco.com
CVPN3000/ASA/PIX7.x-IPSec-Split-DNS-Nam	String	X.X.X.X

Dictionary Type:

RADIUS Attribute:

Attribute Type:

Attribute Value:

= Required fields

3. 配置访问策略为了允许描出的连接和使用：

General

Name: Status:

The Customize button in the lower right area of the policy rules screen controls which policy conditions and results are available here for use in policy rules.

Conditions

NDG:Location:

Time And Date:

Device IP Address:

Results

Authorization Profiles:

vpnclient.cisco.com

You may select multiple authorization profiles. Attributes defined in multiple profiles will use the value from the first profile defined.

故障排除

[命令输出解释程序工具](#) ([仅限注册用户](#)) 支持某些 `show` 命令。请使用Output Interpreter Tool为了查看show命令输出分析。

注意： 使用 `debug` 命令之前，请参阅[有关 Debug 命令的重要信息](#)。

这些调试在VPN头端启用：

互联网安全协会和密钥管理协议(ISAKMP)调试

```
debug crypto isakmp
```

AAA调试

```
debug aaa authentication  
debug aaa authorization  
debug aaa accounting  
debug radius authentication
```