

Когда Проверка подлинности RADIUS и Авторизация Настроены, VPN для удаленного доступа Не Работает

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Введение

Когда обе Проверки подлинности и авторизация настроены, этот документ описывает поведение для Расширенной проверки подлинности (XAUTH) для пользователей VPN.

Предварительные условия

Требования

Компания Cisco рекомендует предварительно ознакомиться со следующими предметами:

- Аутентификация, авторизация и учет (AAA)
- VPN для удаленного доступа

Используемые компоненты

Сведения в этом документе основываются на Маршрутизаторе агрегации (ASR) Cisco, серии 1000, который выполняет программное обеспечение Cisco IOS® XE.

Сведения, представленные в этом документе, были получены от устройств, работающих в специальной лабораторной среде. Все устройства, описанные в этом документе, были запущены с чистой (стандартной) конфигурацией. В рабочей сети необходимо изучить потенциальное воздействие всех команд до их использования.

Проблема

Пользователи VPN настроены, чтобы аутентифицироваться и авторизоваться сервером RADIUS. Конфигурацию на ASR показывают здесь:

```
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
```

Однако каждый раз, когда вы пытаетесь аутентифицироваться, вам никогда не предлагают для ваших учетных данных. На клиенте это сообщение об ошибках замечено в сообщениях журнала:

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

Отладки на ASR указывают, что Имя группы VPN используется в качестве Имени пользователя для попытки авторизации.

```
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.
```

Примечание: Когда локальная проверка подлинности настроена, Однако все хорошо работает.

Решение

Поведение, о котором сообщают, ожидается и не дефект. VPN для удаленного доступа имеет два отдельных опознавательных процесса:

1. Аутентификация общего ключа для туннеля, с которым соединяется пользователь.
2. XAUTH, который аутентифицирует отдельного пользователя.

XAUTH является Фазой 1.5 и происходит только после того, как аутентификация общего ключа преуспевает в фазе 1. Причина вы не в состоянии видеть пользовательское приглашение для пароля, состоит в том, потому что Фаза 1 еще не завершила. Имя пользователя, которое передается в отладках, фактически для аутентификации общего ключа Фазы 1.

Локальная проверка подлинности по сравнению с проверкой подлинности RADIUS

Когда локальный authentication настроен, головная станция VPN берет значение параметра, настроенное под конфигурацией группы для завершения Фазы 1. Это позволяет фазе 1 завершать, таким образом, маршрутизатор может продолжиться к 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_MSG_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_MESG_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_MESG_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_MESG_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=7F7792DEEAB8

*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 attrs 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_MSG_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_MSG_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_MSG_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:
vpncient.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_MESG_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:F5M error - Message from AAA grp/user.

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

```

Когда маршрутизатор настроен для авторизации против сервера RADIUS, он не работает, потому что для получения ключа (для предварительно разрешенной аутентификации), он должен сделать запрос access-request к серверу RADIUS. Однако запрос access-request требует, чтобы имя пользователя было передано RADIUS и так как XAUTH еще не сделан, это не может использовать название пользователя клиента. В этой ситуации это использует имя группы в качестве имени пользователя вместо этого. Однако, так как сервер RADIUS не был установлен для проверки любого пользователя тем ID, он отклоняет запрос. Из-за этого Фаза 1 никогда не завершает, и пользователю никогда не предлагают для учетных данных.

Действующая конфигурация

Настройка маршрутизатора

Вот конфигурация для маршрутизатора.

```

*Dec 26 12:42:13.926: ISAKMP:(0):ISAKMP/tunnel: setting up tunnel vpncient
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 vpncient 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_MESG_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_MESG_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_MESG_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
```

Конфигурация сервера RADIUS

Выполните эти шаги, чтобы настроить сервер RADIUS.

1. Настройте пользователя **Имени группы**:

2. Настройте профиль Авторизации для предоставления всех Пар Значения атрибута (AV):

3. Настройте Политику доступа для разрешения соединения и использования, которые представляют:

Устранение неполадок

[Средство интерпретации выходных данных \(только зарегистрированные клиенты\)](#) поддерживает некоторые команды show. Используйте Средство интерпретации выходных данных, чтобы просмотреть анализ выходных данных команды show.

Примечание: [Прежде чем выполнять какие-либо команды отладки, ознакомьтесь с документом "Важные сведения о командах отладки"](#).

Эти отладки включены на головной станции VPN:

Отладки протокола ISAKMP

```
debug crypto isakmp
```

Отладки AAA

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