Configuración de Cisco Secure VPN Client 1.1 para Windows con IOS mediante la autenticación local ampliada

Contenido

Introducción

Este documento muestra las configuraciones de muestra para la autenticación ampliada local (Xauth) con el cliente VPN. Esta característica proporciona la autenticación a un usuario que tenga el Cliente Cisco Secure VPN 1.1 instalado en su PC indicando al usuario para un nombre de usuario y una contraseña. Refiera a configurar al Cliente Cisco VPN 3.x para Windows al IOS usando la autenticación ampliada local para la información sobre la misma configuración usando el Cliente Cisco VPN 3.x (recomendado).

prerrequisitos

Requisitos

El Xauth se puede también configurar para el TACACS+ y el RADIUS con el cliente VPN.

El Xauth incluye la *autenticación* solamente, no *autorización* (donde se establecen los usuarios pueden ir una vez la conexión). *El considerar* (donde fueron los usuarios) no se implementa.

La configuración debe trabajar sin el Xauth antes de que usted implemente el Xauth. El ejemplo en este documento demuestra la configuración de modo (configuración de modo) y el Network

Address Translation (NAT) además del Xauth, pero la suposición es que conectividad IPSec está presente antes de que agreguen a los comandos xauth.

Componentes Utilizados

La información que contiene este documento se basa en las siguientes versiones de software y hardware.

- Versión 1.1 del cliente VPN (o más adelante)
- Software Release 12.1.2.2.T de Cisco IOS®, 12.1.2.2.P (o más adelante)
- La autenticación local fue probada con un Cisco 3660 que ejecuta c3660-jo3s56i-mz.121-2.3.T

La información que contiene este documento se creó a partir de los dispositivos en un ambiente de laboratorio específico. Todos los dispositivos que se utilizan en este documento se pusieron en funcionamiento con una configuración verificada (predeterminada). Si la red está funcionando, asegúrese de haber comprendido el impacto que puede tener cualquier comando.

Convenciones

Consulte Convenciones de Consejos TécnicosCisco para obtener más información sobre las convenciones del documento.

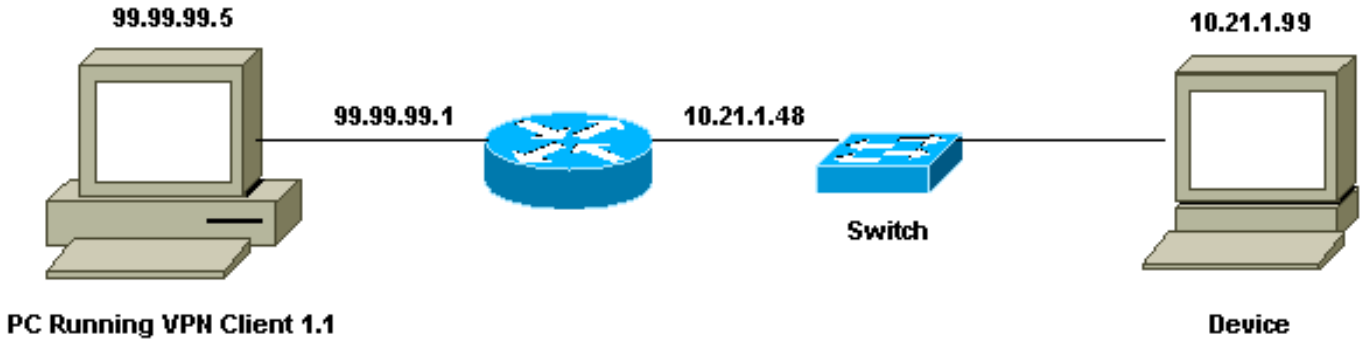
Configurar

En esta sección encontrará la información para configurar las funciones descritas en este documento.

Nota: Utilice la herramienta Command Lookup Tool (clientes registrados solamente) para obtener más información sobre los comandos utilizados en esta sección.

Diagrama de la red

Este documento utiliza esta configuración de red:



Configuración de cliente VPN 1.1

```
Network Security policy:
 1- Myconn
        My Identity = ip address
                Connection security: Secure
```

```
                Remote Party Identity and addressing
                        ID Type: IP subnet
                        10.21.1.0 (range of inside network)
                        Port all Protocol all

                Connect using secure tunnel
                        ID Type: IP address
                        99.99.99.1
                        Pre-shared key = cisco1234

        Authentication (Phase 1)
        Proposal 1
                Authentication method: pre-shared key
                Encryp Alg: DES
                Hash Alg: MD5
                SA life: Unspecified
                Key Group: DH 1

        Key exchange (Phase 2)
        Proposal 1
                Encapsulation ESP
                Encrypt Alg: DES
                Hash Alg: MD5
                Encap: tunnel
                SA life: Unspecified
                no AH

 2- Other Connections
             Connection security: Non-secure
             Local Network Interface
                 Name: Any
                 IP Addr: Any
                 Port: All
```

Con el Xauth habilitado en el router, cuando el usuario intenta conectar con un dispositivo dentro del router (aquí un **ping - t #.#.#.#** fue realizado), una pantalla gris aparece:

```
User Authentication for 3660
Username:
Password:
```

Configuraciones

Configuración del router para el Xauth local

```
Current configuration:
!
version 12.1
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname goss-e4-3660
!
!--- Required for Xauth. aaa new-model AAA
authentication login default line !--- Defines the list
for Xauth. AAA authentication login xauth_list local !
username john password 0 doe ! memory-size iomem 30 ip
subnet-zero ! ip audit notify log ip audit po max-events
100 cns event-service server ! !--- Defines IKE policy.
Default encryption is DES. !--- If you want to have 3DES
encryption for IKE and your image is !--- a 3DES image,
put "encryption 3des" under the ISAKMP !--- policy
configuration mode. !--- This must match the parameters
```

```
in the "Authentication (Phase 1)" proposal !--- on the
VPN Client. crypto isakmp policy 10 hash md5
authentication pre-share !--- Wildcard pre-shared key
for all the clients. crypto isakmp key cisco1234 address
0.0.0.0 0.0.0.0 !--- Address pool for client-mode
configuration addresses. crypto isakmp client
configuration address-pool local ourpool !--- Define the
IPsec transform set. !--- These parameters must match
Phase 2 proposal parameters !--- configured on the
client. !--- If you have 3DES image and would like to
encrypt your data using 3DES, !--- the line appears as
follows: !--- crypto ipsec transform-set ts esp-3des
esp-md5-hmac. crypto ipsec transform-set mypolicy esp-
des esp-md5-hmac !--- Create a dynamic crypto map that
specifies the transform set to use. crypto dynamic-map
dyna 10 set transform-set mypolicy ! !--- Enable the
Xauth with the specified list. crypto map test client
authentication list xauth_list !--- Enable ModeConfig
initiation and response. crypto map test client
configuration address initiate crypto map test client
configuration address respond !--- Create regular crypto
map based on the dynamic crypto map. crypto map test 5
ipsec-isakmp dynamic dyna ! interface FastEthernet0/0 ip
address 10.21.1.48 255.255.255.0 ip nat inside duplex
auto speed auto ! interface FastEthernet0/1 ip address
99.99.99.1 255.255.255.0 ip Nat outside no ip route-
cache no ip mroute-cache duplex auto speed 10 !--- Apply
the crypto map to the public interface of the router.
crypto map test ! interface Ethernet2/0 no ip address
shutdown ! interface Ethernet2/1 no ip address shutdown
! !--- Define the pool of addresses for ModeConfig (see
reference !--- earlier in this output). ip local pool
ourpool 10.2.1.1 10.2.1.254 ip Nat pool outsidepool
99.99.99.50 99.99.99.60 netmask 255.255.255.0 ip Nat
inside source route-map nonat pool outsidepool ip
classless ip route 0.0.0.0 0.0.0.0 10.21.1.1 no ip http
server ! access-list 101 deny ip 10.21.1.0 0.0.0.255
10.2.1.0 0.0.0.255 access-list 101 permit ip 10.21.1.0
0.0.0.255 any route-map nonat permit 10 match ip address
101 ! line con 0 transport input none line aux 0 line
vty 0 4 password ww ! end
```

Verificación

Actualmente, no hay un procedimiento de verificación disponible para esta configuración.

Troubleshooting

En esta sección encontrará información que puede utilizar para solucionar problemas de configuración.

Comandos para resolución de problemas

La herramienta Output Interpreter Tool (clientes registrados solamente) (OIT) soporta ciertos comandos show. Utilice la OIT para ver un análisis del resultado del comando show.

Nota: Consulte Información Importante sobre Comandos de Debug antes de usar un **comando**

debug.

- debug aaa authentication — Muestra información sobre autenticación de AAA/TACACS+.
- debug crypto isakmp — Muestra mensajes acerca de eventos IKE.
- **IPSec del debug crypto** — Eventos del IPSec de las visualizaciones.
- **debug crypto key-exchange** — Mensajes de intercambio de la clave pública del Digital Signature Standard (DSS) de las demostraciones.
- **borre el isakmp crypto** — Especifica qué conexión a borrar.
- **borre el sa crypto** — Asociaciones de seguridad IPSec de las cancelaciones.

Ejemplo de resultado del comando debug

```
goss-e4-3660#show debug General OS: AAA Authentication debugging is on Cryptographic Subsystem:
Crypto ISAKMP debugging is on Crypto Engine debugging is on Crypto IPSEC debugging is on goss-
e4-3660#term mon goss-e4-3660# 01:37:58: ISAKMP (0:0): received packet from 99.99.99.5 (N) NEW
SA 01:37:58: ISAKMP: local port 500, remote port 500 01:37:58: ISAKMP (0:1): Setting client
config settings 627D1E3C 01:37:58: ISAKMP (0:1): (Re)Setting client xauth list xauth_list and
state 01:37:58: ISAKMP: Created a peer node for 99.99.99.5 01:37:58: ISAKMP: Locking struct
627D1E3C from crypto_ikmp_config_initialize_sa 01:37:58: ISAKMP (0:1): processing SA payload.
message ID = 0 !--- Pre-shared key matched. 01:37:58: ISAKMP (0:1): found peer pre-shared key
matching 99.99.99.5 01:37:58: ISAKMP (0:1): Checking ISAKMP transform 1 against priority 10
policy 01:37:58: ISAKMP: encryption DES-CBC 01:37:58: ISAKMP: hash MD5 01:37:58: ISAKMP: default
group 1 01:37:58: ISAKMP: auth pre-share !--- ISAKMP policy proposed by VPN Client matched the
configured ISAKMP policy. 01:37:58: ISAKMP (0:1): atts are acceptable. Next payload is 0
01:37:58: CryptoEngine0: generate alg parameter 01:37:58: CRYPTO_ENGINE: Dh phase 1 status: 0
01:37:58: CRYPTO_ENGINE: DH phase 1 status: 0 01:37:58: ISAKMP (0:1): SA is doing pre-shared key
authentication using id type ID_IPV4_ADDR 01:37:58: ISAKMP (0:1): sending packet to 99.99.99.5
(R) MM_SA_SETUP 01:37:59: ISAKMP (0:1): received packet from 99.99.99.5 (R) MM_SA_SETUP
01:37:59: ISAKMP (0:1): processing KE payload. Message ID = 0 01:37:59: CryptoEngine0: generate
alg parameter 01:37:59: ISAKMP (0:1): processing NONCE payload. Message ID = 0 01:37:59: ISAKMP
(0:1): found peer pre-shared key matching 99.99.99.5 01:37:59: CryptoEngine0: create ISAKMP
SKEYID for conn id 1 01:37:59: ISAKMP (0:1): SKEYID state generated 01:37:59: ISAKMP (0:1):
processing vendor id payload 01:37:59: ISAKMP (0:1): processing vendor id payload 01:37:59:
ISAKMP (0:1): sending packet to 99.99.99.5 (R) MM_KEY_EXCH 01:37:59: ISAKMP (0:1): received
packet from 99.99.99.5 (R) MM_KEY_EXCH 01:37:59: ISAKMP (0:1): processing ID payload. Message ID
= 0 01:37:59: ISAKMP (0:1): processing HASH payload. Message ID = 0 01:37:59: CryptoEngine0:
generate hmac context for conn id 1 01:37:59: ISAKMP (0:1): processing NOTIFY INITIAL_CONTACT
protocol 1 spi 0, message ID = 0 01:37:59: ISAKMP (0:1): SA has been authenticated with
99.99.99.5 01:37:59: ISAKMP (1): ID payload next-payload : 8 type : 1 protocol : 17 port : 500
length : 8 01:37:59: ISAKMP (1): Total payload length: 12 01:37:59: CryptoEngine0: generate hmac
context for conn id 1 01:37:59: CryptoEngine0: clear DH number for conn id 1 !--- Starting
Xauth. 01:37:59: ISAKMP (0:1): sending packet to 99.99.99.5 (R) CONF_XAUTH 01:38:00: ISAKMP
(0:1): received packet from 99.99.99.5 (R) CONF_XAUTH 01:38:00: ISAKMP (0:1): (Re)Setting client
xauth list xauth_list and state 01:38:00: ISAKMP (0:1): Need XAUTH 01:38:00: AAA: parse
name=ISAKMP idb type=-1 tty=-1 01:38:00: AAA/MEMORY: create_user (0x627D27D0) user='' ruser=''
port='ISAKMP' rem_addr='99.99.99.5' authen_type=ASCII service=LOGIN priv=0 01:38:00:
AAA/AUTHEN/START (324819201): port='ISAKMP' list='xauth_list' action=LOGIN service=LOGIN
01:38:00: AAA/AUTHEN/START (324819201): found list xauth_list 01:38:00: AAA/AUTHEN/START
(324819201): Method=LOCAL 01:38:00: AAA/AUTHEN (324819201): status = GETUSER 01:38:00: ISAKMP:
got callback 1 01:38:00: ISAKMP/xauth: request attribute XAUTH_TYPE 01:38:00: ISAKMP/xauth:
request attribute XAUTH_MESSAGE 01:38:00: ISAKMP/xauth: request attribute XAUTH_USER_NAME
01:38:00: ISAKMP/xauth: request attribute XAUTH_USER_PASSWORD 01:38:00: CryptoEngine0: generate
hmac context for conn id 1 01:38:00: ISAKMP (0:1): initiating peer config to 99.99.99.5. ID =
944484565 01:38:00: ISAKMP (0:1): sending packet to 99.99.99.5 (R) CONF_XAUTH 01:38:02:
IPSEC(decapsulate): error in decapsulation crypto_ipsec_sa_exists !--- The user has delayed the
input of the username/password. 01:38:05: ISAKMP (0:1): retransmitting phase 2 CONF_XAUTH
944484565 ... 01:38:05: ISAKMP (0:1): incrementing error counter on sa: retransmit phase 2
01:38:05: ISAKMP (0:1): incrementing error counter on sa: retransmit phase 2 01:38:05: ISAKMP
(0:1): retransmitting phase 2 944484565 CONF_XAUTH 01:38:05: ISAKMP (0:1): sending packet to
99.99.99.5 (R) CONF_XAUTH 01:38:08: ISAKMP (0:1): received packet from 99.99.99.5 (R) CONF_XAUTH
```

01:38:08: ISAKMP (0:1): processing transaction payload from 99.99.99.5. Message ID = 944484565 01:38:08: CryptoEngine0: generate hmac context for conn id 1 01:38:08: ISAKMP: Config payload REPLY 01:38:08: ISAKMP/xauth: reply attribute XAUTH_TYPE 01:38:08: ISAKMP/xauth: reply attribute XAUTH_USER_NAME 01:38:08: ISAKMP/xauth: reply attribute XAUTH_USER_PASSWORD 01:38:08: AAA/AUTHEN/CONT (324819201): continue_login (user='(undef)') 01:38:08: AAA/AUTHEN (324819201): status = GETUSER 01:38:08: AAA/AUTHEN/CONT (324819201): Method=LOCAL 01:38:08: AAA/AUTHEN (324819201): status = GETPASS 01:38:08: AAA/AUTHEN/CONT (324819201): continue_login (user='john') 01:38:08: AAA/AUTHEN (324819201): status = GETPASS 01:38:08: AAA/AUTHEN/CONT (324819201): Method=LOCAL 01:38:08: AAA/AUTHEN (324819201): status = PASS 01:38:08: ISAKMP: got callback 1 01:38:08: CryptoEngine0: generate hmac context for conn id 1 01:38:08: ISAKMP (0:1): initiating peer config to 99.99.99.5. ID = 944484565 01:38:08: ISAKMP (0:1): sending packet to 99.99.99.5 (R) CONF_XAUTH 01:38:08: ISAKMP (0:1): received packet from 99.99.99.5 (R) CONF_XAUTH 01:38:08: ISAKMP (0:1): processing transaction payload from 99.99.99.5. Message ID = 944484565 01:38:08: CryptoEngine0: generate hmac context for conn id 1 01:38:08: ISAKMP: Config payload ACK *!--- Xauth finished.* **01:38:08: ISAKMP (0:1): deleting node 944484565 error FALSE reason "done with transaction"** 01:38:08: ISAKMP (0:1): allocating address 10.2.1.2 01:38:08: CryptoEngine0: generate hmac context for conn id 1 01:38:08: ISAKMP (0:1): initiating peer config to 99.99.99.5. ID = -2139076758 01:38:08: ISAKMP (0:1): sending packet to 99.99.99.5 (R) CONF_ADDR **01:38:08: ISAKMP (0:1): received packet from 99.99.99.5 (R) CONF_ADDR** 01:38:08: ISAKMP (0:1): processing transaction payload from 99.99.99.5. Message ID = -2139076758 01:38:08: CryptoEngine0: generate hmac context for conn id 1 01:38:08: ISAKMP: Config payload ACK **01:38:08: ISAKMP (0:1): peer accepted the address!** 01:38:08: ISAKMP (0:1): adding static route for 10.2.1.2 01:38:08: ISAKMP (0:1): installing route 10.2.1.2 255.255.255.255 99.99.99.5 01:38:08: ISAKMP (0:1): deleting node -2139076758 error FALSE reason "done with transaction" 01:38:08: ISAKMP (0:1): Delaying response to QM request. 01:38:09: ISAKMP (0:1): received packet from 99.99.99.5 (R) QM_IDLE 01:38:09: ISAKMP (0:1): (Re)Setting client xauth list xauth_list and state 01:38:09: CryptoEngine0: generate hmac context for conn id 1 01:38:09: ISAKMP (0:1): processing HASH payload. Message ID = -1138778119 01:38:09: ISAKMP (0:1): processing SA payload. Message ID = -1138778119 01:38:09: ISAKMP (0:1): Checking IPSec proposal 1 01:38:09: ISAKMP: transform 1, ESP_DES 01:38:09: ISAKMP: attributes in transform: 01:38:09: ISAKMP: authenticator is HMAC-MD5 01:38:09: ISAKMP: encaps is 1 01:38:09: validate proposal 0 *!--- Proposed Phase 2 transform set matched configured IPsec transform set.* **01:38:09: ISAKMP (0:1): atts are acceptable.** 01:38:09: IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) dest= 99.99.99.1, src= 99.99.99.5, dest_proxy= 10.21.1.0/255.255.255.0/0/0 (type=4), src_proxy= 10.2.1.2/255.255.255.255/0/0 (type=1), protocol= ESP, transform= ESP-Des esp-md5-hmac , lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4 01:38:09: validate proposal request 0 01:38:09: ISAKMP (0:1): processing NONCE payload. Message ID = -1138778119 01:38:09: ISAKMP (0:1): processing ID payload. Message ID = -1138778119 01:38:09: ISAKMP (1): ID_IPV4_ADDR src 10.2.1.2 prot 0 port 0 01:38:09: ISAKMP (0:1): processing ID payload. Message ID = -1138778119 01:38:09: ISAKMP (1): ID_IPV4_ADDR_SUBNET dst 10.21.1.0/255.255.255.0 prot 0 port 0 01:38:09: ISAKMP (0:1): asking for 1 spis from ipsec 01:38:09: IPSEC(key_engine): got a queue event... 01:38:09: IPSEC(spi_response): getting spi 3339398037 for SA from 99.99.99.5 to 99.99.99.1 for prot 3 01:38:09: ISAKMP: received ke message (2/1) 01:38:10: CryptoEngine0: generate hmac context for conn id 1 01:38:10: ISAKMP (0:1): sending packet to 99.99.99.5 (R) QM_IDLE 01:38:10: ISAKMP (0:1): received packet from 99.99.99.5 (R) QM_IDLE 01:38:10: CryptoEngine0: generate hmac context for conn id 1 01:38:10: ipsec allocate flow 0 01:38:10: ipsec allocate flow 0 **01:38:10: ISAKMP (0:1): Creating IPSec SAs** 01:38:10: inbound SA from 99.99.99.5 to 99.99.99.1 (proxy 10.2.1.2 to 10.21.1.0) 01:38:10: has spi 0xC70B2B95 and conn_id 2000 and flags 4 01:38:10: outbound SA from 99.99.99.1 to 99.99.99.5 (proxy 10.21.1.0 to 10.2.1.2) 01:38:10: has spi -1679939467 and conn_id 2001 and flags 4 01:38:10: ISAKMP (0:1): deleting node -1769610309 error FALSE reason "saved qm no longer needed" 01:38:10: ISAKMP (0:1): deleting node -1138778119 error FALSE reason "quick mode done (await()" 01:38:10: IPSEC(key_engine): got a queue event... *!--- IPsec SAs created.* **01:38:10: IPSEC(initialize_sas): , (key Eng. msg.) dest= 99.99.99.1, src= 99.99.99.5, dest_proxy= 10.21.1.0/255.255.255.0/0/0 (type=4), src_proxy= 10.2.1.2/0.0.0.0/0/0 (type=1), protocol= ESP, transform= ESP-Des esp-md5-hmac , lifedur= 0s and 0kb, spi= 0xC70B2B95(3339398037), conn_id= 2000, keysize= 0, flags= 0x4 01:38:10: IPSEC(initialize_sas): , (key Eng. msg.) src= 99.99.99.1, dest= 99.99.99.5, src_proxy= 10.21.1.0/255.255.255.0/0/0 (type=4), dest_proxy= 10.2.1.2/0.0.0.0/0/0 (type=1), protocol= ESP, transform= ESP-Des esp-md5-hmac , lifedur= 0s and 0kb, spi= 0x9BDE2875(2615027829), conn_id= 2001, keysize= 0, flags= 0x4 01:38:10: IPSEC(create_sa): sa created, (sa) sa_dest= 99.99.99.1, sa_prot= 50, sa_spi= 0xC70B2B95(3339398037), sa_trans= ESP-Des esp-md5-hmac , sa_conn_id= 2000 01:38:10: IPSEC(create_sa): sa created, (sa) sa_dest= 99.99.99.5, sa_prot= 50, sa_spi= 0x9BDE2875(2615027829), sa_trans= ESP-Des esp-md5-hmac , sa_conn_id= 2001** 01:38:10: ISAKMP: received ke message (4/1) 01:38:10: ISAKMP: Locking struct 627D1E3C for IPSEC

Información Relacionada

- EOS y EOL para el Cliente Cisco Secure VPN
- Negociación IPSec/Protocolos IKE
- Soporte Técnico y Documentación - Cisco Systems