Configurazione VG224 SCCP Secure Encrypted

Sommario

Introduzione

Questo documento descrive la configurazione con crittografia protetta Signaling Connection Control Part (SCCP) su VG224 Analog Gateway.

Prerequisiti

Requisiti

Cisco raccomanda la conoscenza dei seguenti argomenti:

- SCCP
- VG224
- Cisco Unified Communications Manager (CUCM)

Componenti usati

Le informazioni di questo documento si basano sulle seguenti versioni software:

- VG224

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

Configurazione

Passaggio 1. Copiare il certificato callmanager.pem in VG224 (a cui si fa riferimento come punto di attendibilità SICURO nella configurazione seguente)

Passaggio 2. Creare un certificato autofirmato sul VG224 con l'indirizzo MAC Fast Ethernet0/0 (bind interface) e il nome del soggetto composto solo dalle ultime 10 cifre.

Passaggio 3. Copiare il vg-cert in CUCM come trust del gestore chiamate e riavviare CUCM.

Le informazioni vengono fornite per la configurazione dei certificati richiesti per VG224.

```
Router(config)#crypto key generate rsa general-keys label vg modulus 1024
Router(config)#crypto pki trustpoint vg
Router(ca-trustpoint)#enrollment selfsigned
serial-number none
fqdn none
ip-address none
subject-name cn=1A:E2:85:7B:E2  <----- Last 10 DIGITS ONLY of the SCCP bind interface.
Formatting EXACTLY as shown with colons.
rsakeypair vg
crypto pki enroll vg
Router(config)#crypto pki export vg_cert pem terminal
```

Suggerimento: Guida di riferimento per i comandi

Nota: L'icona del lucchetto non è visibile quando si effettua una chiamata da un telefono analogico VG224 protetto a un telefono IP protetto a causa della presenza di CSCti08882

Verifica

Queste informazioni servono per verificare la corretta registrazione di VG224

```
Router#show sccp
SCCP Admin State: UP
Gateway Local Interface: FastEthernet0/0
        IPv4 Address: 14.1.97.95
        Port Number: 2000
IP Precedence: 5
User Masked Codec list: None
Call Manager: 172.18.172.204, Port Number: 2000
        Priority: N/A, Version: 7.0, Identifier: 1
        Trustpoint: N/A
Call Manager: 172.18.172.205, Port Number: 2000
        Priority: N/A, Version: 7.0, Identifier: 2
        Trustpoint: N/A
Call Manager: 172.18.172.206, Port Number: 2000
        Priority: N/A, Version: 7.0, Identifier: 3
        Trustpoint: N/A

AutoCfg_Virtual_Endpoint Oper State: ACTIVE - Cause Code: NONE
Active Call Manager: 172.18.172.204, Port Number: 2000
TCP Link Status: CONNECTED, Device Name: AN1AE2857BE2FFF
Reported Max Streams: 0, Reported Max OOS Streams: 0
Supported Codec: g711ulaw, Maximum Packetization Period: 20

Alg_Phone Oper State: ACTIVE - Cause Code: NONE
Active Call Manager: 172.18.172.204, Port Number: 2443
TCP Link Status: CONNECTED, Device Name: AN1AE2857BE2400
Security
 Signaling Security: ENCRYPTED TLS
Media Security: SRTP
Supported crypto suites :AES_CM_128_HMAC_SHA1_32
Reported Max Streams: 1, Reported Max OOS Streams: 0
Supported Codec: rfc2833 dtmf, Maximum Packetization Period: 30
Supported Codec: g711ulaw, Maximum Packetization Period: 20
Supported Codec: g711alaw, Maximum Packetization Period: 20
Supported Codec: g729r8, Maximum Packetization Period: 220
```

```
Supported Codec: g729ar8, Maximum Packetization Period: 220
Supported Codec: g729br8, Maximum Packetization Period: 220
Supported Codec: g729r8, Maximum Packetization Period: 220
Supported Codec: ilbc, Maximum Packetization Period: 120
TLS : ENABLED
```

Ciò dimostra che il VG224 sicuro usa la configurazione SCCP IOS.

```
Building configuration...


Current configuration : 5258 bytes
!
version 15.1
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Router
!
boot-start-marker
boot system slot0:vg224-i6k9s-mz.151-4.M3
boot-end-marker
!
!
enable secret 5 $1$f99B$PWPClPrUNzgsUZEO8aBYG.
!
no aaa new-model
crypto pki token default removal timeout 0
!
crypto pki trustpoint SECURE
 enrollment terminal
 revocation-check crl
!
crypto pki trustpoint vg
 enrollment selfsigned
 serial-number none
 fqdn none
 ip-address none
 subject-name cn=1A:E2:85:7B:E24       ( instead of this command,  we can use hiddle command
"mac-address Fast Ethernet0/0 as well )
 revocation-check crl
 rsakeypair AN1AE2857BE2400
!
!
crypto pki certificate chain SECURE
 certificate ca 588C9B7C2D4B37F03930E8C926D02A18
   <truncated>
crypto pki certificate chain vg certificate self-signed 03 <truncated> ip source-route ! ip cef
ip name-server 172.18.108.43 ip name-server 172.18.108.34 ! ! no ipv6 cef ! stcapp ccm-group 1
stcapp security trustpoint vg stcapp security mode encrypted stcapp ! stcapp feature access-code
! stcapp feature speed-dial ! ! ! stcapp supplementary-services port 2/0 fallback-dn 862224 ! !
! ! ! ! ! ! ! voice-card 0 ! ! ! ! ! ! ! ! ! ! interface FastEthernet0/0 ip address dhcp duplex
auto speed auto ! interface FastEthernet0/1 no ip address duplex auto speed auto ! ip forward-
protocol nd ! ip http server no ip http secure-server ip route 0.0.0.0 0.0.0.0 14.1.97.1 254 ip
route 0.0.0.0 0.0.0.0 14.1.97.1 254 ! ! ! control-plane ! ! voice-port 2/0 timeouts initial 60
timeouts interdigit 60 timeouts ringing infinity ! voice-port 2/1 ! <truncated>
! voice-port 2/23 ! ccm-manager config server 172.18.172.204 ccm-manager config ccm-manager sccp
local FastEthernet0/0 ccm-manager sccp ! ! mgcp profile default ! sccp local FastEthernet0/0
sccp ccm 172.18.172.204 identifier 1 version 7.0 sccp ccm 172.18.172.205 identifier 2 version
7.0 sccp ccm 172.18.172.206 identifier 3 version 7.0 sccp ! sccp ccm group 1 associate ccm 1
priority 1 associate ccm 2 priority 2 associate ccm 3 priority 3 ! dial-peer voice 999200 pots
```

```
service stcapp securiy mode encrypted =====> Required command
 port 2/0
!
dial-peer voice 99920 pots
! service stcapp

securiy mode encrypted   =====> Required command
 port 2/1
!
!(configure all ports in same secure mode)
!
line con 0
line aux 0
line vty 0 4
 password ww
 login
 transport input all
!
ntp server 172.18.108.15
end
```