# Configuración de VG224 SCCP Secure Encrypted

## Contenido



## Introducción

Este documento describe la configuración cifrada segura Señalización de la parte de control de conexión (SCCP) en la puerta de enlace analógica VG224.

## Prerequisites

### Requirements

Cisco recomienda que tenga conocimiento sobre estos temas:

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

### Componentes Utilizados

La información que contiene este documento se basa en estas versiones de software:

- VG224

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Si tiene una red en vivo, asegúrese de entender el posible impacto de cualquier comando.

#### Configurar

Paso 1. Copie el certificado callmanager.pem al VG224 (al que se hace referencia como punto de confianza SEGURO en la siguiente configuración)

Paso 2. Cree un certificado autofirmado en el VG224 con la dirección MAC de FastEthernet0/0 (interfaz de enlace) con sólo los últimos 10 dígitos como nombre de asunto.

Paso 3. Copie vg-cert en CUCM como CallManager Trust y reinicie CUCM.

La información se proporciona para la configuración de los certificados requeridos para 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
```

**Consejo:** Guía de referencia de comandos

**Nota:** No verá un icono de bloqueo cuando llame desde un teléfono analógico VG224 seguro a un teléfono IP seguro debido a la advertencia CSCti08882

### Verificación

Esta información es para la verificación del registro exitoso de 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
```

Esto muestra que VG224 seguro con la configuración del IOS SCCP.

```
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
```