

# 配置Cisco VPN 5000和路由器以開啟GRE隧道

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## 簡介

本檔案概述了允許執行Cisco IOS®軟體的思科路由器和Cisco VPN 5000系列集中器開啟通用路由封裝(GRE)通道所需的組態。

## 必要條件

### 需求

本文件沒有特定需求。

### 採用元件

本文中的資訊係根據以下軟體和硬體版本：

- Cisco IOS軟體版本12.0(7)T
- Cisco VPN 5000 Concentrator軟體版本5.2.19US
- Cisco VPN 5002 Concentrator

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

### 慣例

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

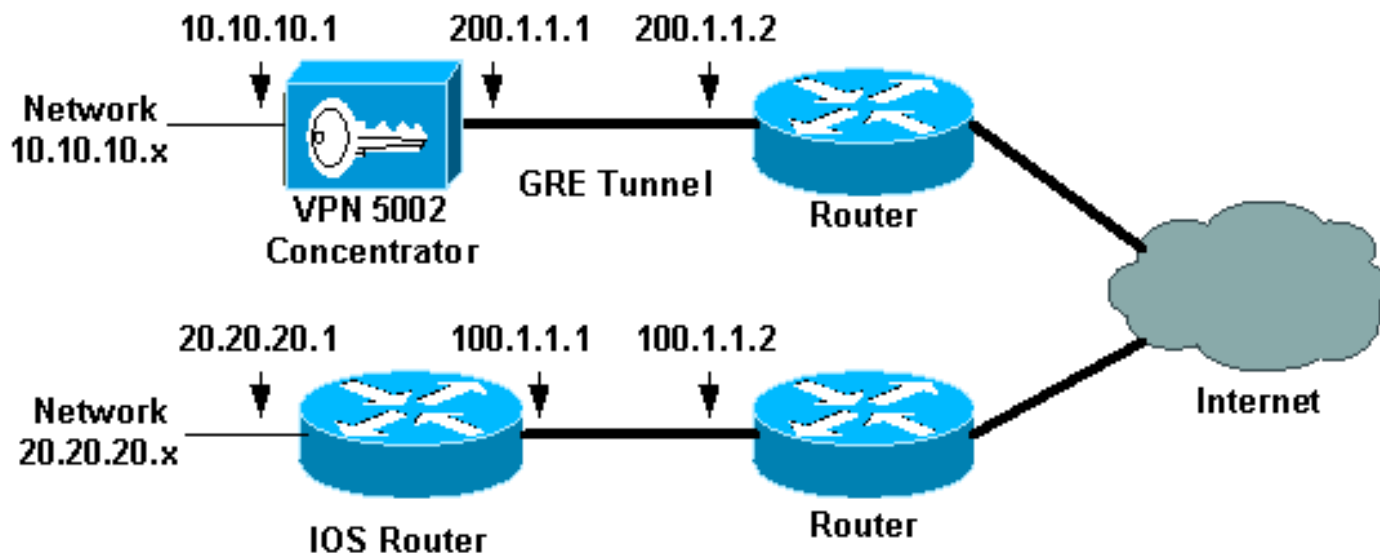
## 設定

本節提供用於設定本文中所述功能的資訊。

注意：要查詢有關本文檔中使用的命令的其他資訊，請使用[命令查詢工具](#)(僅限註冊客戶)。

## 網路圖表

本檔案會使用下圖中所示的網路設定。



## 組態

本文檔使用此處顯示的配置。

- [Cisco VPN 5002 Concentrator](#)
- [運行Cisco IOS軟體的路由器](#)

### Cisco VPN 5002 Concentrator

```
[ General ]
IPSecGateway           = 200.1.1.2
DeviceName             = "omar5002"
EthernetAddress        = 00:00:a5:
e9:c8:00
DeviceType             = VPN 5002/8 Concentrator
ConfiguredOn           = Timeserver not configured
ConfiguredFrom         = Command Line, from Console
EnablePassword         =
Password               =

[ IP Ethernet 1:0 ]
Mode                   = Routed
SubnetMask             = 255.255.255.0
IPAddress              = 200.1.1.1

[ IP Ethernet 0:0 ]
Mode                   = Routed
SubnetMask             = 255.255.255.0
```

```
IPAddress                = 10.10.10.1

[ Tunnel Partner VPN 1 ]
EncryptMethod            = None
Encryption                = Off
Authentication            = Off
KeyManage                 = Manual
Mode                      = Main
Partner                  = 100.1.1.1
LocalAccess               = "10.10.10.0/24"
BindTo                    = "ethernet1:0"
Peer                      = "20.20.20.0/24"

[ IP Static ]
20.20.20.0 255.255.255.0 vpn 1 1

[ IP VPN 1 ]
Numbered                  = Off
Mode                      = Routed
Configuration size is 1107 out of 65500 bytes.
omar5002#
```

## 執行Cisco IOS軟體的路由器

```
Router Configuration:
Router#show running-config
Building configuration...
Current configuration:
!
version 12.0
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Router
!
!
ip subnet-zero
!
!
!
interface Tunnel0
ip unnumbered Ethernet1
no ip directed-broadcast
tunnel source 100.1.1.1
tunnel destination 200.1.1.1
!
interface Ethernet0
ip address 100.1.1.1 255.255.255.0
no ip directed-broadcast
!
interface Ethernet1
ip address 20.20.20.1 255.255.255.0
no ip directed-broadcast
!
!
ip classless
ip route 0.0.0.0 0.0.0.0 100.1.1.2 1
ip route 10.10.10.0 255.255.255.0 Tunnel0
no ip http server
```

```

!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
!
end

```

## 驗證

本節提供的資訊可用於確認您的組態是否正常運作。

[輸出直譯器工具](#) (僅供註冊客戶使用) 支援某些 **show** 命令，此工具可讓您檢視 **show** 命令輸出的分析。

- **show vpn statistics verbose** — 提供詳細的隧道資訊。
- **show interface** — 提供介面統計資訊。

這是從 Cisco VPN 5002 集中器獲取的 **show vpn statistics verbose** 命令輸出示例。

```

omar5002#show vpn statistic verbose
Current In      High   Running Tunnel  Tunnel  Tunnel
Active  Negot   Water  Total  Starts  OK      Error
-----
Users    0        0       0       0       0       0       0
Partners 1        0       1       1       0       0       0
Total    1        0       1       1       0       0       0
Stats
VPN0:1
  Wrapped          697
  Unwrapped        697
  BadEncap          0
  BadAuth           0
  BadEncrypt        0
  rx IP             718
  rx IPX            0
  rx Other          0
  tx IP             734
  tx IPX            0
  tx Other          0
  IKE rekey         0
Input VPN pkts dropped due to no SA: 0
Input VPN pkts dropped due to no free queue entries: 0
ISAKMP Negotiation stats
Admin packets in      0
Fastswitch packets in 0
No cookie found       0
Can't insert cookie   0
Inserted cookie(L)    0
Inserted cookie(R)    0
Cookie not inserted(L) 0
Cookie not inserted(R) 0
Cookie conn changed   0
Cookie already inserted 0
Deleted cookie(L)     0
Deleted cookie(R)     0
Cookie not deleted(L) 0
Cookie not deleted(R) 0
Forwarded to RP       0

```

```
Forwarded to IOP          0
Bad UDP checksum         0
Not fastswitched        0
```

這是從路由器取得的show interface命令的命令輸出示例。

```
Router#show interface tunnel 0
Tunnel0 is up, line protocol is up
Hardware is Tunnel
Interface is unnumbered. Using address of Ethernet1 (20.20.20.1)
MTU 1476 bytes, BW 9 Kbit, DLY 500000 usec,
reliability 255/255, txload 55/255, rxload 113/255
Encapsulation TUNNEL, loopback not set
Keepalive set (10 sec)
Tunnel source 100.1.1.1, destination 200.1.1.1
Tunnel protocol/transport GRE/IP, key disabled, sequencing disabled
Checksumming of packets disabled, fast tunneling enabled
Last input 00:00:15, output 00:00:15, output hang never
Last clearing of "show interface" counters never
Queueing strategy: fifo
Output queue 0/0, 1 drops; input queue 0/75, 0 drops
5 minute input rate 4000 bits/sec, 5 packets/sec
5 minute output rate 11000 bits/sec, 5 packets/sec
1309 packets input, 129264 bytes, 0 no buffer
Received 0 broadcasts, 0 runts, 0 giants, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
1348 packets output, 316468 bytes, 0 underruns
0 output errors, 0 collisions, 0 interface resets
0 output buffer failures, 0 output buffers swapped out
Router#
```

## [疑難排解](#)

目前尚無適用於此組態的具體疑難排解資訊。

## [相關資訊](#)

- [Cisco VPN 5000系列集中器支援頁](#)
- [Cisco VPN 5000使用者端支援頁面](#)
- [IPSec \( IP 安全通訊協定 \) 支援頁面](#)
- [技術支援 - Cisco Systems](#)