

使用VPDN的MLPPP組態範例

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簡介

本文介紹了客戶端、第2層隧道協定訪問集中器(LAC)和第2層隧道協定網路伺服器(LNS)的配置，這些配置有助於在客戶端和建立在虛擬專用撥號網路(VPDN)隧道上的LNS之間建立多鏈路點對點協定(MLPPP)會話。

必要條件

需求

思科建議您在嘗試此設定之前符合以下要求：

- 端到端第1層連線為UP

採用元件

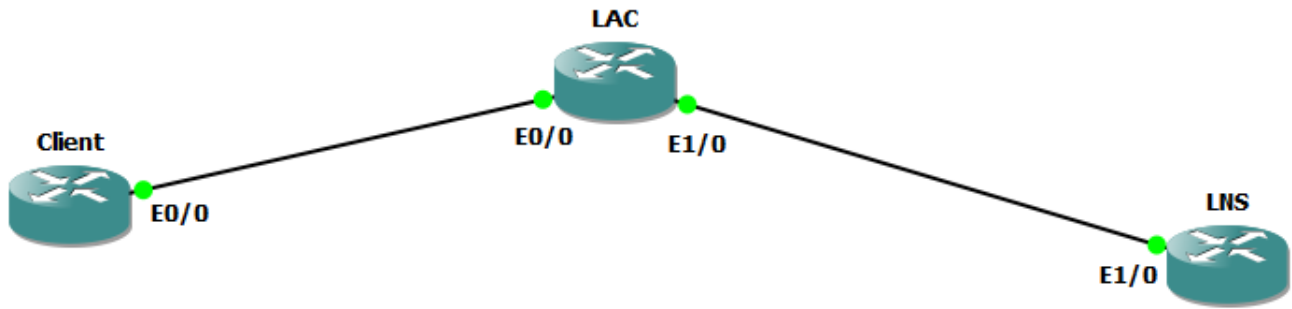
本文件所述內容不限於特定軟體和硬體版本。

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。

設定

附註：使用[命令查詢工具](#)(僅供[已註冊](#)客戶使用)可獲取本節中使用的命令的更多資訊。

網路圖表



組態

附註：在PPP或多鏈路PPP會話發起時間期間PPP控制資料包交換的情況下，多鏈路PPP會話在CPE和LNS之間協商，而不是與LAC協商。LAC不知道多鏈路PPP會話。因此，當CPE發起PPP-LCP會話時，如果LAC尚未與LNS建立連線（通常情況下），作為LCP協商一部分包括的多鏈路（最大接收重建單元[MRRU]）協商可能會失敗。當LAC和LNS之間的IP可達性建立時，LNS可以與CPE重新協商多鏈路(MRRU)LCP選項，然後兩個對等裝置可以建立端到端多鏈路PPP會話。

客戶端配置：

下面是客戶端路由器上的配置示例：

```
interface Ethernet0/0

no ip address

pppoe enable group global

pppoe-client dial-pool-number 1

interface Dialer1

64

ip address negotiated

encapsulation ppp

1

dialer idle-timeout 0

keepalive 30

ppp max-failure 30

ppp chap hostname user@cisco.com

ppp chap password cisco

ppp multilink
```

```
no cdp enable
```

LAC配置：

LAC路由器上的配置示例如下所示：

```
hostname LAC
```

```
!
```

```
vpdn enable
```

```
!
```

```
vpdn-group 1
```

```
request-dialin
```

```
l2tp
```

```
cisco.com
```

```
ip 192.168.1.2
```

```
no l2tp tunnel authentication
```

```
!
```

```
bba-group pppoe global
```

```
virtual-template 1
```

```
!
```

```
interface Ethernet0/0
```

```
no ip address
```

```
pppoe enable group global
```

```
interface Ethernet1/0
```

```
ip address 192.168.1.1 255.255.255.0
```

```
interface Virtual-Template1
```

```
no ip address
```

```
ppp authentication chap
```

```
ppp multilink
```

LNS配置：

LNS路由器上的配置示例如下所示：

```
vpdn enable
!
vpdn-group 1
accept-dialin
l2tp
virtual-template 1
terminate-fromLAC
lcp renegotiation on-mismatch
no l2tp tunnel authentication
!
user@cisco.comcisco
int loopback0
ip address 10.10.10.10 255.255.255.0
interface Ethernet1/0
ip address 192.168.1.2 255.255.255.0
interface Virtual-Template1
mtu 1492
ip unnumbered Loopback0
ipcisco
ppp authentication chap
ppp multilink
!
ip local pool cisco 10.10.10.11 10.10.10.24
```

驗證

客戶端、LAC和LNS上啟用了以下調試：

- Debug ppp negotiation
- Debug pppoe event
- Debug ppp multilink event
- Debug vpdn event
- Debug vpdn call event

客戶端日誌：

```

*201411411:01:12.744:PADI:= Ethernet0/0
*201411411:01:12.744:PPPoE 0:I PADO R:aabb.cc02.bd00 L:aabb.cc02.bc00
Et0/0
*201411411:01:14.824:PPPOE:
*201411411:01:14.824:PPPoEPADR
*201411411:01:14.825:PPPoE 9:I PAD R:aabb.cc02.bd00 L:aabb.cc02.bc00
Et0/0
*201411411:01:14.825:PPPoEPADR
*201411411:01:14.825:%DIALER-6-BIND:Vi3Di1
*201411411:01:14.825:PPPoE:
*201411411:01:14.825:PPPoE :
*201411411:01:14.825:[0]PPPoE 9:PPPoE
*201411411:01:14.834:%LINK-3-UP:Interface Virtual-Access3, changed state
to up
*201411411:01:14.834:Vi3 PPP:UP
*201411411:01:14.834:Vi3 PPP:CstateUp
*201411411:01:14.834:PPP:[2A970D92E8]
*201411411:01:14.834:ppp14 PPP:
*201411411:01:14.834:Vi3 PPP:
*201411411:01:14.834:Vi3 PPP:[C2000013]ID[14]
*201411411:01:14.834:Vi3 LCP:Event[OPEN] State[Initial to Starting]
*201411411:01:14.834:Vi3 PPP:
*201411411:01:14.834:Vi3 LCP:O CONFREQ [] id 1 len 30
*201411411:01:14.834:Vi3 LCP: MagicNumber 0xBC220EF6(0x0506BC220EF6)
*201411411:01:14.835:Vi3 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.835:Vi3 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)
*201411411:01:14.835:Vi3 LCP:Event[UP] State[]
*201411411:01:14.835:Vi3 LCP:I CONFREQ [REQsent] id 1 len 29
*201411411:01:14.835:Vi3 LCP: MRU 1492(0x010405D4)
*201411411:01:14.835:Vi3 LCP: AuthProto CHAP(0x0305C22305)
*201411411:01:14.835:Vi3 LCP: 0xBC21F6F0(0x0506BC21F6F0)
*201411411:01:14.835:Vi3 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.835:Vi3 LCP: EndpointDisc 1 LAC(0x1306014C4143)
*201411411:01:14.835:Vi3 LCP:O CONFNAK [REQsent] id 1 len 8
*201411411:01:14.835:Vi3 LCP: MRU 1500(0x010405DC)
*201411411:01:14.835:Vi3 LCP:Event[Receive ConfReq-] State[REQsent to
REQsent]
*201411411:01:14.835:Vi3 LCP:I CONFACK [REQsent] id 1 len 30
*201411411:01:14.835:Vi3 LCP: MagicNumber 0xBC220EF6(0x0506BC220EF6)
*201411411:01:14.835:Vi3 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.835:Vi3 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)
*201411411:01:14.835:Vi3 LCP:Event[Receive ConfAck] State[REQsent to

```

ACKrcvd]

*201411411:01:14.836:Vi3 LCP:I CONFREQ [ACKrcvd] id 2 len 29

*201411411:01:14.836:Vi3 LCP: MRU 1500(0x010405DC)

*201411411:01:14.836:Vi3 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.836:Vi3 LCP: 0xBC21F6F0(0x0506BC21F6F0)

*201411411:01:14.836:Vi3 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.836:Vi3 LCP: EndpointDisc 1 LAC(0x1306014C4143)

*201411411:01:14.836:Vi3 LCP:O CONFACK [ACKrcvd] id 2 len 29

*201411411:01:14.836:Vi3 LCP: MRU 1500(0x010405DC)

*201411411:01:14.836:Vi3 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.836:Vi3 LCP: 0xBC21F6F0(0x0506BC21F6F0)

*201411411:01:14.836:Vi3 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.836:Vi3 LCP: EndpointDisc 1 LAC(0x1306014C4143)

*201411411:01:14.836:Vi3 LCP:Event[Receive ConfReq+] State[ACKrcvd to Open]

*201411411:01:14.854:Vi3 PPP:Phase is AUTHENTICATING by the peer

*201411411:01:14.854:Vi3 LCP:

*201411411:01:14.856:Vi3 CHAP:id 1 len 24 from "LAC"

*201411411:01:14.856:Vi3 CHAP:CHAP

*201411411:01:14.856:Vi3 CHAP:CHAP

*201411411:01:14.856:Vi3 CHAP:Oid 1 len 34 from "user@cisco.com"

*201411411:01:14.861:Vi3 LCP:I CONFREQ [Open] id 1 len 39

*201411411:01:14.861:Vi3 LCP: MRU 1492(0x010405D4)

*201411411:01:14.861:Vi3 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.861:Vi3 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)

*201411411:01:14.861:Vi3 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.861:Vi3 LCP: EndpointDisc 1

user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.861:Vi3 PPPPPP

*201411411:01:14.861:Vi3 PPP:NET STOPAAA

*201411411:01:14.861:Vi3 LCP:Event[LCP Reneg][Open to Open]

*201411411:01:14.861:Vi3 LCP:Event[DOWN] State[Open to Starting]

*201411411:01:14.861:Vi3 PPP:Phase is DOWN

*201411411:01:14.861:Vi3 PPP:[2A970D9898]

*201411411:01:14.861:Vi3 PPP:ppp14 PPP:

*201411411:01:14.861:Vi3 PPP:

*201411411:01:14.861:Vi3 PPP:

*201411411:01:14.861:Vi3 PPP:[2B000014]ID[14]

*201411411:01:14.861:Vi3 LCP:Event[OPEN] State[Initial to Starting]

*201411411:01:14.861:Vi3 PPP:

*201411411:01:14.861:Vi3 LCP:O CONFREQ [] id 1 len 30

*201411411:01:14.861:Vi3 LCP: MagicNumber 0xBC220F12(0x0506BC220F12)

*201411411:01:14.861:Vi3 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.861:Vi3 LCP: EndpointDisc 1

user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.862:Vi3 LCP:Event[UP] State[]

*201411411:01:14.862:Vi3 LCP:I CONFREQ [REQsent] id 1 len 39

*201411411:01:14.862:Vi3 LCP: MRU 1492(0x010405D4)

*201411411:01:14.862:Vi3 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.862:Vi3 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)

*201411411:01:14.862:Vi3 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.862:Vi3 LCP: EndpointDisc 1

user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.862:Vi3 PPP:user@cisco.com
*201411411:01:14.862:Vi3 LCP:O CONFNAK [REQsent] id 1 len 8
*201411411:01:14.862:Vi3 LCP: MRU 1500(0x010405DC)
*201411411:01:14.862:Vi3 LCP:Event[Receive ConfReq-] State[REQsent to REQsent]
*201411411:01:14.862:Vi3 LCP:I CONFACK [REQsent] id 1 len 30
*201411411:01:14.862:Vi3 LCP: MagicNumber 0xBC220F12(0x0506BC220F12)
*201411411:01:14.862:Vi3 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.862:Vi3 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)
*201411411:01:14.862:Vi3 LCP:Event[Receive ConfAck] State[REQsent to ACKrcvd]
*201411411:01:14.862:Vi3 LCP:I CONFREQ [ACKrcvd] id 2 len 39
*201411411:01:14.862:Vi3 LCP: MRU 1500(0x010405DC)
*201411411:01:14.862:Vi3 LCP: AuthProto CHAP(0x0305C22305)
*201411411:01:14.862:Vi3 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)
*201411411:01:14.862:Vi3 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.862:Vi3 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)
*201411411:01:14.862:Vi3 PPP:user@cisco.com
*201411411:01:14.862:Vi3 LCP:O CONFACK [ACKrcvd] id 2 len 39
*201411411:01:14.862:Vi3 LCP: MRU 1500(0x010405DC)
*201411411:01:14.862:Vi3 LCP: AuthProto CHAP(0x0305C22305)
*201411411:01:14.862:Vi3 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)
*201411411:01:14.862:Vi3 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.862:Vi3 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)
*201411411:01:14.862:Vi3 LCP:Event[Receive ConfReq+] State[ACKrcvd to Open]
*201411411:01:14.884:Vi3 PPP:Phase is AUTHENTICATING by the peer
*201411411:01:14.884:Vi3 LCP:
*201411411:01:14.895:Vi3 CHAP:id 2 len 27 from "LNS"
*201411411:01:14.895:Vi3 CHAP:CHAP
*201411411:01:14.895:Vi3 CHAP:CHAP
*201411411:01:14.895:Vi3 CHAP:Oid 2 len 34 from "user@cisco.com"
*201411411:01:14.896:Vi3 CHAP:Iid 2 len 4
*201411411:01:14.896:Vi3 PPP:Phase is FORWARDING Attempting Forward
*201411411:01:14.897:Vi3 PPP:LCP
*201411411:01:14.897:Vi3 MLP:
*201411411:01:14.897:Vi3 PPP:
*201411411:01:14.897:Vi3 MLP:
*201411411:01:14.897:Vi3 MLP:
*201411411:01:14.897:Vi3 MLP:SSS
*201411411:01:14.897:Vi3 MLP:Di1
*201411411:01:14.897:Vi3 MLP:SSS
*201411411:01:14.897:Vi3 MLP:Di1
*201411411:01:14.897:Vi3 MLP:SSS connectVi4
*201411411:01:14.897:PPP:[2A970D95C0]
*201411411:01:14.897:ppp15 PPP:
*201411411:01:14.897:Vi4 MLP:10000064
*201411411:01:14.897:Vi4 MLP:
*201411411:01:14.897:Vi4 MLP:1001524
*201411411:01:14.897:Vi4 MLP:1001524

```

*201411411:01:14.897:%DIALER-6-BIND:Vi4Di1
*201411411:01:14.897:Vi4 MLP:Di1
*201411411:01:14.897:Vi4 MLP:Vi3
*201411411:01:14.897:Vi4 MLP:6464
*201411411:01:14.897:Vi3 MLP:InitEnabled1
*201411411:01:14.897:Vi4 MLP:
*201411411:01:14.897:Vi4 MLP:Vi3LNS
*201411411:01:14.897:Vi4 MLP:1001524
*201411411:01:14.898:Vi3 MLP:SSSPPP[0x6F000015]
*201411411:01:14.898:%LINEPROTO-5-UPDOWN:Virtual-Access3up
*201411411:01:14.898:Vi4 MLP:
*201411411:01:14.914:%LINK-3-UP:Interface Virtual-Access4up
*201411411:01:14.914:Vi4 PPP:MLPLCP
*201411411:01:14.914:Vi4 PPP:Phase is UP
*201411411:01:14.914:Vi4 IPCP:CP. state[Initial]
*201411411:01:14.914:Vi4 IPCP:Event[OPEN] State[Initial to Starting]
*201411411:01:14.914:Vi4 IPCP:O CONFREQ [] id 1 len 10
*201411411:01:14.914:Vi4 IPCP: 0.0.0.0(0x030600000000)
*201411411:01:14.914:Vi4 IPCP:Event[UP] State[]
*201411411:01:14.915:Vi4 IPCP:I CONFREQ [REQsent] id 1 len 10
*201411411:01:14.915:Vi4 IPCP: 10.10.10.10(0x03060A0A0A0A)
*201411411:01:14.915:Vi4 IPCP:O CONFACK [REQsent] id 1 len 10
*201411411:01:14.915:Vi4 IPCP: 10.10.10.10(0x03060A0A0A0A)
*201411411:01:14.915:Vi4 IPCP:Event[Receive ConfReq+] State[REQsent to
ACKsent]
*201411411:01:14.915:%LINEPROTO-5-UPDOWN:Virtual-Access4up
*201411411:01:14.915:Vi4 IPCP:I CONFNAK [ACKsent] id 1 len 10
*201411411:01:14.915:Vi4 IPCP: 10.10.10.18(0x03060A0A0A12)
*201411411:01:14.915:Vi4 IPCP:O CONFREQ [ACKsent] id 2 len 10
*201411411:01:14.915:Vi4 IPCP: 10.10.10.18(0x03060A0A0A12)
*201411411:01:14.915:Vi4 IPCP:Event[Receive ConfNak/Rej] State[ACKsent
to ACKsent]
*201411411:01:14.936:Vi4 IPCP:I CONFACK [ACKsent] id 210
*201411411:01:14.936:Vi4 IPCP: 10.10.10.18(0x03060A0A0A12)
*201411411:01:14.936:Vi4 IPCP:Event[Receive ConfAck] State[ACKsent to
Open]
*201411411:01:14.954:Vi4 IPCP:
*201411411:01:14.954:Di1 IPCP:IP10.10.10.18
*201411411:01:14.954:Di1AVL010.10.10.10
*201411411:01:14.954:Di1 IPCP:10.10.10.10

```

show ppp all

```

Interface/ID OPEN+ Nego* Fail-Stage Peer Address Peer Name
-----
-----

```

```

Vi4 IPCP+10.10.10.10 LNS

```

```

Vi3 LCP+10.10.10.10 LNS

```

show ppp multilink

Virtual-Access4

LNS

LNS

[1] user@cisco.com

user@cisco.com

[1] user@cisco.com

00:00:17641/255

121921524

Dialer interface is Dialer1

0/0/

00

0/0/0

0x30x0

1255

Vi300:00:17

LAC

*201411411:01:12.744:PPPoE 0:I PADI R:aabb.cc02.bc00 L:ffff.ffff.ffff
Et0/0

*201411411:01:12.744:NULL

*201411411:01:12.744:PPPoE 0:O PADO R:aabb.cc02.bd00 L:aabb.cc02.bc00
Et0/0

*201411411:01:12.744:NULL

*201411411:01:14.824:PPPoE 0:I PADR.R:aabb.cc02.bc00 L:aabb.cc02.bd00
Et0/0

*201411411:01:14.824:NULL

*201411411:01:14.824:PPPoE :

*201411411:01:14.824:[9]PPPoE 9:IE

*201411411:01:14.824:[9]PPPoE 9:AAAIID 17

*201411411:01:14.824:[9]PPPoE 9:AAA

*201411411:01:14.824:[9]PPPoE 9:SSS

*201411411:01:14.824:[9]PPPoE 9:R:aabb.cc02.bd00 L:aabb.cc02.bc00 Et0/0

*201411411:01:14.825:[9]PPPoE 9:NAS_PORT_POLICY_ENQUIRYSSS

*201411411:01:14.825:PPP:[2A970D9898]

*201411411:01:14.825:ppp9 PPP:

*201411411:01:14.825:[9]PPPoE 9:PPP

*201411411:01:14.825:[9]PPPoE 9:SSS

*201411411:01:14.825:[9]PPPoE 9:State PROVISION_PPP EVENT SSM
PROVISIONED

*201411411:01:14.825:[9]PPPoE 9:O PAD R:aabb.cc02.bc00 L:aabb.cc02.bd00
Et0/0

*201411411:01:14.825:ppp9 PPP:vpn

*201411411:01:14.825:ppp9 PPP:

*201411411:01:14.825:ppp9 PPP:[B4000009]ID[9]

*201411411:01:14.825:ppp9 LCP:Event[OPEN] State[Initial to Starting]

*201411411:01:14.825:ppp9 PPP LCP:[]

*201411411:01:14.835:ppp9 LCP:I CONFREQ [Stopped] id 1 len 30

*201411411:01:14.835:ppp9 LCP: MagicNumber 0xBC220EF6(0x0506BC220EF6)

*201411411:01:14.835:ppp9 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.835:ppp9 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.835:ppp9 LCP:O CONFREQ [Stopped] id 1 len 29

*201411411:01:14.835:ppp9 LCP: MRU 1492(0x010405D4)

*201411411:01:14.835:ppp9 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.835:ppp9 LCP: 0xBC21F6F0(0x0506BC21F6F0)

*201411411:01:14.835:ppp9 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.835:ppp9 LCP: EndpointDisc 1 LAC(0x1306014C4143)

*201411411:01:14.835:ppp9 LCP:O CONFACK [] id 1 len 30

*201411411:01:14.835:ppp9 LCP: MagicNumber 0xBC220EF6(0x0506BC220EF6)

*201411411:01:14.835:ppp9 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.835:ppp9 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.835:ppp9 LCP:Event[Receive ConfReq+] State[ACKsent]

*201411411:01:14.836:ppp9 LCP:I CONFNAK [ACKsent] id 1 len 8

*201411411:01:14.836:ppp9 LCP: MRU 1500(0x010405DC)

*201411411:01:14.836:ppp9 LCP:O CONFREQ [ACKsent] id 2 len 29

*201411411:01:14.836:ppp9 LCP: MRU 1500(0x010405DC)

*201411411:01:14.836:ppp9 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.836:ppp9 LCP: 0xBC21F6F0(0x0506BC21F6F0)

*201411411:01:14.836:ppp9 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.836:ppp9 LCP: EndpointDisc 1 LAC(0x1306014C4143)

*201411411:01:14.836:ppp9 LCP:Event[Receive ConfNak/Rej] State[ACKsent
to ACKsent]

*201411411:01:14.836:ppp9 LCP:I CONFACK [ACKsent] id 229

*201411411:01:14.836:ppp9 LCP: MRU 1500(0x010405DC)

*201411411:01:14.836:ppp9 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.836:ppp9 LCP: 0xBC21F6F0(0x0506BC21F6F0)

*201411411:01:14.836:ppp9 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.836:ppp9 LCP: EndpointDisc 1 LAC(0x1306014C4143)

*201411411:01:14.836:ppp9 LCP:Event[Receive ConfAck] State[ACKsent to
Open]

*201411411:01:14.856:ppp9 PPP:

*201411411:01:14.856:ppp9 CHAP:O CHALLENGE id 1 len 24 from "LAC"

*201411411:01:14.856:ppp9 LCP:

```
*201411411:01:14.856:ppp9 CHAP:Iid 1 len 34user@cisco.com
*201411411:01:14.856:ppp9 PPP:Phase is FORWARDING Attempting Forward
*201411411:01:14.856:VPDN CALL [uid:9]:
*201411411:01:14.856:VPDN CALL [uid:9]:
*201411411:01:14.857:[9]PPPoE 9:IE nas
*201411411:01:14.857:VPDN uid:9TX(10000000)RX(10000000)
*201411411:01:14.857:VPDN uid:9TX(10000000)RX(10000000)
*201411411:01:14.857:F6000000VPDN uid:9 L2TUN socket session connect
*201411411:01:14.857:VPDN uid:9L2-L2idb
*201411411:01:14.857:VPDN MGR [uid:9]:192.168.1.2
*201411411:01:14.857:[9]PPPoE 9:LCP_NEGOTIATIONPPP
*201411411:01:14.857:[9]PPPoE 9:SSS
*201411411:01:14.857:[9]PPPoE 9:SSS
*201411411:01:14.859:VPDN Received L2TUN socket
*201411411:01:14.859:VPDN uid:9swidb
*201411411:01:14.859:[9]PPPoE 9:SSS
*201411411:01:14.859:[9]PPPoE 9:SSS
*201411411:01:14.859:VPDNL2TUN socket
*201411411:01:14.859:VPDN MGR [uid:9]:user@cisco.com
*201411411:01:14.859:VPDN uid:9 VPDN session up
*201411411:01:14.859:VPDN CALL [uid:9]:
*201411411:01:14.860:ppp9 PPP:Phase is FORWARDED Session Forwarded
*201411411:01:14.860:[9]PPPoE 9:LCP_NEGOTIATIONPPP FORWARDED
*201411411:01:14.860:[9]PPPoE 9:
```

LAC#show ppp all

```
Interface/ID OPEN+ Nego* Fail-Stage Peer Address Peer Name
```

0xB4000009 LCP+ CHAP*0.0.0.0 user@cisco.com

LAC#show ppp multilink

LNS

```
*201411411:01:14.858:VPDNL2TUN socket
*201411411:01:14.859:VPDN uid:13 L2TUN socket session accept requested
*201411411:01:14.859:VPDN uid:13L2-L2idb
*201411411:01:14.860:VPDNL2TUN socket
*201411411:01:14.860:VPDN uid:13 VPDN session up
*201411411:01:14.860:PPP:[2A970D95C0]
*201411411:01:14.860:ppp13 PPP:
*201411411:01:14.860:ppp13 LCP:Event[Jam Start][Initial to Closed]
*201411411:01:14.860:ppp13 LCP:RCVD CONFACK29
*201411411:01:14.861:ppp13 LCP: MRU 1500(0x010405DC)
*201411411:01:14.861:ppp13 LCP: AuthProto CHAP(0x0305C22305)
*201411411:01:14.861:ppp13 LCP: 0xBC21F6F0(0x0506BC21F6F0)
*201411411:01:14.861:ppp13 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.861:ppp13 LCP: EndpointDisc 1 LAC(0x1306014C4143)
*201411411:01:14.861:ppp13 PPP:LCPrcv CONFACK
*201411411:01:14.861:ppp13 LCP:CONFACK len 30
*201411411:01:14.861:ppp13 LCP: MagicNumber 0xBC220EF6(0x0506BC220EF6)
*201411411:01:14.861:ppp13 LCP: MRRU 1524(0x110405F4)
*201411411:01:14.861:ppp13 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)
*201411411:01:14.861:ppp13 LCP:Event[DOWN] State[Closed to Initial]
```

*201411411:01:14.861:ppp13 LCP:Event[CLOSE] State[Initial to Initial]

*201411411:01:14.861:ppp13 LCP:Event[OPEN] State[Initial to Starting]

*201411411:01:14.861:ppp13 LCP:O CONFREQ [] id 1 len 39

*201411411:01:14.861:ppp13 LCP: MRU 1492(0x010405D4)

*201411411:01:14.861:ppp13 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.861:ppp13 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)

*201411411:01:14.861:ppp13 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.861:ppp13 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.861:ppp13 LCP:Event[UP] State[]

*201411411:01:14.862:ppp13 LCP:I CONFREQ [REQsent] id 1 len 30

*201411411:01:14.862:ppp13 LCP: MagicNumber 0xBC220F12(0x0506BC220F12)

*201411411:01:14.862:ppp13 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.862:ppp13 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.862:ppp13 PPP:user@cisco.com

*201411411:01:14.862:ppp13 LCP:O CONFACK [REQsent] id 1 len 30

*201411411:01:14.862:ppp13 LCP: MagicNumber 0xBC220F12(0x0506BC220F12)

*201411411:01:14.862:ppp13 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.862:ppp13 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.862:ppp13 LCP:Event[Receive ConfReq+] State[REQsent to
ACKsent]

*201411411:01:14.862:ppp13 LCP:I CONFNAK [ACKsent] id 1 len 8

*201411411:01:14.862:ppp13 LCP: MRU 1500(0x010405DC)

*201411411:01:14.862:ppp13 LCP:O CONFREQ [ACKsent] id 2 len 39

*201411411:01:14.862:ppp13 LCP: MRU 1500(0x010405DC)

*201411411:01:14.862:ppp13 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.862:ppp13 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)

*201411411:01:14.862:ppp13 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.862:ppp13 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.862:ppp13 LCP:Event[Receive ConfNak/Rej] State[ACKsent
to ACKsent]

*201411411:01:14.863:ppp13 LCP:I CONFACK [ACKsent] id 2 len 39

*201411411:01:14.863:ppp13 LCP: MRU 1500(0x010405DC)

*201411411:01:14.863:ppp13 LCP: AuthProto CHAP(0x0305C22305)

*201411411:01:14.863:ppp13 LCP: MagicNumber 0xBC21E526(0x0506BC21E526)

*201411411:01:14.863:ppp13 LCP: MRRU 1524(0x110405F4)

*201411411:01:14.863:ppp13 LCP: EndpointDisc 1
user@cisco.com(0x1310017573657240737572662E6F7267)

*201411411:01:14.863:ppp13 LCP:Event[Receive ConfAck] State[ACKsent to
Open]

*201411411:01:14.895:ppp13 PPP:

*201411411:01:14.895:ppp13 CHAP:O CHALLENGE id 2 len 27 from "LNS"

*201411411:01:14.895:ppp13 LCP:

*201411411:01:14.895:ppp13 CHAP:Iid 2 len 34 from "user@cisco.com"

*201411411:01:14.895:ppp13 PPP:Phase is FORWARDING Attempting Forward

*201411411:01:14.895:ppp13 PPP:

*201411411:01:14.895:ppp13 PPP:Phase is FORWARDING Attempting Forward

*201411411:01:14.896:VPDN uid:13user@cisco.com bandwidth 10000 Kbps

*201411411:01:14.896:user@cisco.comVPDN Vi310000 Kbps

L2X_ADJ:Vi3ctx1

*201411411:01:14.896:VPDNL2TUN socket

*201411411:01:14.896:Vi3 PPP:

*201411411:01:14.896:Vi3 CHAP:Oid 2 len 4

*201411411:01:14.896:Vi3 MLP:

*201411411:01:14.896:Vi3 PPP:

*201411411:01:14.896:Vi3 MLP:
*201411411:01:14.896:Vi3 MLP:
*201411411:01:14.896:Vi3 MLP:SSS
*201411411:01:14.896:Vi3 MLP:1
*201411411:01:14.897:Vi3 MLP:SSS
*201411411:01:14.897:Vi3 MLP:1
*201411411:01:14.897:%LINK-3-UP:Interface Virtual-Access3, changed state to up
*201411411:01:14.897:Vi3 MLP:SSS connectVi4
*201411411:01:14.897:PPP:[2A970D9898]
*201411411:01:14.897:ppp14 PPP:
*201411411:01:14.897:Vi4 MLP:10000010000
*201411411:01:14.897:Vi4 MLP:Vi3
*201411411:01:14.897:Vi3 MLP:37492MTU1488
*201411411:01:14.897:Vi4 MLP:1000010000
*201411411:01:14.897:Vi3 MLP:InitEnabled1
*201411411:01:14.897:Vi4 MLP:Vi3user@cisco.com
*201411411:01:14.898:Vi3 MLP:SSSPPP[0x5900000E]
*201411411:01:14.898:%LINEPROTO-5-UPDOWN:Virtual-Access3up
*201411411:01:14.898:Vi4 MLP:
*201411411:01:14.915:%LINK-3-UP:Interface Virtual-Access4up
*201411411:01:14.915:Vi4 PPP:MLPLCP
*201411411:01:14.915:Vi3 PPP:IPCP[1] id[1]
*201411411:01:14.915:Vi4 PPP:Phase is UP
*201411411:01:14.915:Vi4 IPCP:CP. state[Initial]
*201411411:01:14.915:Vi4 IPCP:Event[OPEN] State[Initial to Starting]
*201411411:01:14.915:Vi4 IPCP:O CONFREQ [] id 1 len 10


```

*201411411:01:14.915:Vi4 IPCP: 10.10.10.10(0x03060A0A0A0A)
*201411411:01:14.915:Vi4 IPCP:Event[UP] State[]
*201411411:01:14.915:Vi3 PPP:ncp
*201411411:01:14.915:Vi3 IPCP:Vi4
*201411411:01:14.915:Vi4 IPCP:I CONFREQ [REQsent] id 1 len 10
*201411411:01:14.915:Vi4 IPCP: 0.0.0.0(0x030600000000)
*201411411:01:14.915:Vi4 IPCP0.0.0.00.0.0
*201411411:01:14.915:Vi4 IPCP:10.10.10.18
*201411411:01:14.915:Vi4 IPCP:O CONFNAK [REQsent] id 1 len 10
*201411411:01:14.915:Vi4 IPCP: 10.10.10.18(0x03060A0A0A12)
*201411411:01:14.915:Vi4 IPCP:Event[Receive ConfReq-] State[REQsent to
REQsent]
*201411411:01:14.915:Vi4 IPCP:I CONFACK [REQsent] id 1 len 10
*201411411:01:14.915:Vi4 IPCP: 10.10.10.10(0x03060A0A0A0A)
*201411411:01:14.915:Vi4 IPCP:Event[Receive ConfAck] State[REQsent to
ACKrcvd]
*201411411:01:14.916:%LINEPROTO-5-UPDOWN:Virtual-Access4up
*201411411:01:14.936:Vi4 IPCP:I CONFREQ [ACKrcvd] id 2 len 10
*201411411:01:14.936:Vi4 IPCP: 10.10.10.18(0x03060A0A0A12)
*201411411:01:14.936:Vi4 IPCP:O CONFACK [ACKrcvd] id 2 len 10
*201411411:01:14.936:Vi4 IPCP: 10.10.10.18(0x03060A0A0A12)
*201411411:01:14.936:Vi4 IPCP:Event[Receive ConfReq+] State[ACKrcvd to
Open]
*201411411:01:14.965:Vi4 IPCP:
*201411411:01:14.965:Vi4AVL010.10.10.18
*201411411:01:14.965:Vi4 IPCP:10.10.10.18

```

LNS#show ppp all

```
Interface/ID OPEN+ Nego* Fail-Stage Peer Address Peer Name
```

```
-----  
-----  
Vi4 IPCP+ LocalT 10.10.10.18 user@cisco.com  
Vi3 LCP+ CHAP+ LocalT 10.10.10.18 user@cisco.com
```

```
LNS#show ppp multilink
```

```
Virtual-Access4
```

```
user@cisco.com
```

```
user@cisco.com
```

```
[1] user@cisco.com
```

```
LNS
```

```
[1] user@cisco.com
```

```
00:00:10100001/255
```

```
1219215
```

```
0/0/
```

```
00
```

```
0/0/0
```

```
0x00x3
```

```
1255
```

```
LAC:Vi3(192.168.1.1) 00:00:1037500,1488
```

相關資訊

- [配置客戶端啟動的撥入VPDN隧道](#)
- [T技術支援與檔案 — Cisco Systems](#)