# WindowsマシンからCiscoルータへのPPPoEセッ ションの設定

# 内容

概要 <u>前提条件</u> <u>要件</u> 使用するコンポーネント 設定 <u>ネットワーク図</u> 設定 BRASの設定 Windowsマシンの設定 確認 トラブルシュート <u>関連情報</u>

### 概要

このドキュメントでは、Windowsマシン(PPPoEクライアントとして機能する)とPPPoEサーバ として機能するCiscoルータの間にPoint-to-Point Connection over Ethernet(PPPoE)を設定する手 順について説明します。

# 前提条件

### 要件

エンドツーエンドのレイヤ1接続がユーザプライオリティ(UP)であることを理解しておくことを お勧めします。

### 使用するコンポーネント

このドキュメントの内容は、特定のソフトウェアやハードウェアのバージョンに限定されるもの ではありません。

このドキュメントの情報は、特定のラボ環境にあるデバイスに基づいて作成されました。このド キュメントで使用するすべてのデバイスは、初期(デフォルト)設定の状態から起動しています 。対象のネットワークが実稼働中である場合には、どのようなコマンドについても、その潜在的 な影響について確実に理解しておく必要があります。

## 設定

### ネットワーク図

このドキュメントでは、次の図に示すネットワーク設定を使用しています。



### 設定

#### **BRASの設定**

aaa new-model
! Enabling AAA on router
!
aaa authentication ppp PPPOE-METD group PPPOE-RADIUS
! Defining AAA method list for PPP Authentication
aaa authorization network PPPOE-AUTHOR-METD group PPPOE-RADIUS
! Defining AAA method list for PPP Authorization
aaa accounting network PPPOE-ACCT-METD start-stop group PPPOE-RADIUS
! Defining AAA method list for PPP Accounting
!
aaa group server radius PPPOE-RADIUS
! Defining AAA Server Group named PPPOE-RADIUS

server-private 10.106.39.253 key cisco
ip radius source-interface GigabitEthernet0/0/0

bba-group pppoe BBA-TEST virtual-template 10 ! interface GigabitEthernet0/0/1.47 encapsulation dot10 1 native pppoe enable group BBA-TEST end ! interface Virtual-Template10 ip unnumbered Loopback10 peer default ip address pool local ! Calling three named AAA Method lists configured above under this Virtual Template ppp authentication pap chap PPPOE-METD ppp authorization PPPOE-AUTHOR-METD ppp accounting PPPOE-ACCT-METD end 1 ip local pool local 192.168.1.2 192.168.1.10 1 interface Loopback10

ip address 192.168.1.1 255.255.255.255 end

!

#### Windowsマシンの設定

PPPoEクライアントとして機能するWindowsマシンからPPPoEセッションを開始するには、次の 手順を実行します。

ステップ1:図に示すように、[Network and Sharing Center]を開き、[Set up a new connection or network]をクリックします。

Network and Sharing Center		-DX
Control Panel - Net	work and Internet - Network and Sharing Center - 😰 Search Control Panel	
Elle Edit View Iools Help		
Control Panel Home	View your basic network information and set up connections	
Change adapter settings	鰔 🌆 🎱 See full map	
Change advanced sharing settings	ADMIN-PC Network 7 Internet (This computer)	
	View your active networks Connect or disconnect	
	Network 7         Access type:         Internet           Work network         Connections:         © Local Area Connection 6	
	Change your networking settings	
	Set up a new connection or network Set up a wireless, bildband, dial-up, ad hoc, or VPN connection; or set up a router or access point.	
	Connect to a network Connect or reconnect to a wireless, wired, dial-up, or VPN network connection.	
	Choose homegroup and sharing options Access files and printers located on other network computers, or change sharing settings.	
	Troubleshoot problems Diagnose and repair network problems, or get troubleshooting information.	
See also		
HomeGroup		
Internet Options		
Windows Firewall		

ステップ2:図に示すように、[Connect to the Internet]を選択し、[Next]をクリックします。



ステップ3:図に示すように、[Set up a new connection anyway]を選択します。

Network and Sharing Center				_ 🗆 🗙
Control Panel • N	etwork and Internet  • Network and Sharing Center	👻 🚺 Sea	ch Control Panel	2
File Edit View Tools Help				
Control Panel Home	View your basic network information and set up connectic	105		0
characterization and the			See full map	
Change adapter settings	ernet		X	
🕝 🐽 Connect to	the Internet			
			Connect or disconnect	
You are already	y connected to the Internet			
			nection 6	
	- Martin - M			
			house point	
			access poerc.	
*	Browse the Internet now			
			L	
•	Set up a new connection anyway		p.	
	hg"			
See also				
HomeGro				
Internet (		Cancel	1	
Windows			-	

# ステップ4:図に示**すように、[No, create a new connection**:]を選択します。

Network and Sharing Center				_O×
Control Panel - Network and Inter	net • Network and Sharing Center	👻 🚺 Search	Control Panel	2
File Edit View Tools Help Control Panel Home View your Change adapter settings	basic network information and set up conne	ctions	See full map	0
Change a Sconnect to the Internet		×	Connect or disconnect	
<ul> <li>No, <u>create a new connect</u></li> <li>Yes, I'll choose an gxistin</li> </ul>	ition g connection		access point.	
PPPoE-FINAL WAN Miniport (	PPPOE)		p.	
See also HomeGrov Internet (		Next Cancel	_	

ステップ5:図に示すように、[Broadband (PPPoE)]をクリックします。

Network and S	haring Center			_O×
00 1	Control Panel • Network and Internet • Network and Sharing Center •	Search (	Control Panel	2
File Edit View	Tools Help			
Control Panel H	Wiew your basic network information and set up connections			0
Change adapte	r settings 🙀 ——— 🌆 ————	- <b>(</b>	See full map	
Change a 🌉 🕻	onnect to the Internet			
6	Connect to the Internet			
			Connect or disconnect	
	How do you want to connect?			
			hection 6	
	Broadband (PPPoE) Connect using DSL or cable that requires a user name and password.			
			access point.	
			ps.	
	Show connection options that this computer is not set up to use			
See also	Help me choose			
HomeGro				
Internet (		Cancel		
whoows			]	

ステップ6:図に示すように、[User name]、[Password]、および[**Connection name]を入力**し**、を クリック**します **Connect.** 

Network a	nd Sharing Center				- 🗆 ×
00	😵 🔹 Control Panel 👻 Network and	Internet - Network and Sharing Center	÷ 📴	Search Control Panel	2
File Edit V	view Tools Help				
Control Pa	nel Home View	your basic network information and set up co	nnections		
A	dankar saktinar	· · · · · · · · · · · · · · · · · · ·		See full map	
Change at	Connect to the Internet				
Charge a	Connect to the later	net			
	Connect to the filter	HCA .		Connect or disconnect	
	Type the information fro	om your Internet service provider (ISP)			
			_	nection 6	
	User name:	cisco			
	Decount	[Password your ISP gave you]	-		
	Eessword.				
		Description of the second seco		access point.	
		I Kemember this password			
	Connection name:	PPPOE-USER	-		
				5.	
	😌 🥅 Allow other peop	le to use this connection			
	This option allow	s anyone with access to this computer to use this	connection.		
See also	Ldon't have an ISP				
HomeGrov					
Internet (			Connect, Can	cel	
Windows					

これにより、サーバへのPPPoEセッションが開始されます。図に示すように、確認セクションを 確認します。

🔀 Network and Sharing Center	_ 🗆 ×
🕐 😵 • Control Panel • Network and Internet • Network and Sharing Center 🔹 😫 Sea	rch Control Panel 🗾 😥
File Edit View Tools Help	
Control Panel Home View your basic network information and set up connections	€ _
Change adapter settings	See full map
Change a 🔹 Connect to the Internet	×
Connect to the Internet	
	Connect or disconnect
Testing your Internet connection	
	hection 6
	ess
	access point.
See also	
HomeGrov	<b>\$</b> .
Internet Glip, Cancel	1
Windows	-

# 確認

ステップ1:[Networks] タブを再び開き、ネットワーク(この例ではPPPOE-USERという名前)を 選択し、ステータスを確認します。[Connect] をクリックして、ユーザ名とパスワードを入力した 後でセッションを開始します(図を参照)。

Network and Sharing Center				_101 ×
Control Panel - Net	work and Internet + Network and Sharing Center	- 6	Search Control Panel	<u> 1</u>
File Edit View Tools Help				
Control Panel Home	Yiew your basic network information and set up co	nections		
	<b>A</b>		See full map	
Change adapter settings	Mar 1999		Sec. 1	
Change advanced sharing settings	ADMIN-PC Network 7 (This computer)		Internet	
	View your active networks		Connect or disconnect	
	Network 7	Access type: In	iternet	
	Work network	Connections: 📮 Lo	ocal Area Connection 6	
	Change your pelworking settings	1		
	Set up a new consection or network			
	Set up a wireless, broadband, dial-up, ad hoc, or	VPN connection; or set u	up a router or access point.	
			Currently connected to:	47
	Connect to a network		Network 7	
	Connect or reconnect to a wireless, wired, dia-u	p, or vew network conne	Internet access	
	Choose homegroup and sharing options			100
	Access files and printers located on other netwo	k computers, or change :	Dial-up and VPN	<u> </u>
	Troubleshoot exchience		PPPOE-USER	4
	Diagnose and repair network problems, or get th	subleshooting information	n n	Connect
See also				Touncer
HomeGroup			PPPoE-FINAL	
Internet Options			PPP-1	31
Windows Firewall				
		1	pppoe	ų,
		(non 10.76		
	TETP Server:	¥10.1		
	TFTP Userlpa:	ss: tftpu		
			Open Network and Sharin	g Center

鞋 Network and Sharing Center				
Control Panel - Net	work and Internet + Network and Sharing Cent	er	<ul> <li>Search Control Panel</li> </ul>	2
File Edit View Tools Help				
Control Panel Home	View your basic network information a	nd set up connectio	ns	
Change adapter settings	A	- 📭 –	See full map	
Change advanced sharing settings	ADMIN-PC (This computer)	Network 7	Internet	
	View your active networks		Connect or disconnect	
	Connect PPPOE-USER	×	<	
			exting: Internet	
			econs: g Local Area Connectori o	
			ection; or set up a router or access point.	
	User name: cisco		network connection.	
	Password		rs, or change sharing settings.	
	Save this user name and password for th	e following users:		
**	C Melogly		ting information.	
See also	😚 🗙 Anyone who uses this computer		-	
HomeGroup		- C		
Internet Options	Connect Cancel Properti	es <u>H</u> elp		
Windows Firewall			-	

ステップ2:コマンドプロンプトを開き、ipconfig /all**コマンドを実行**して、ネゴシエートされた IPアドレスを確認します(図を参照)。

Connection-specific DNS Suffix .: Description	PPP adapter PPPOE-USER:	
Description PPPOE-USER Physical Address	Connection-specific DNS Suffix . :	
Physical Address	Description : PPPOE-USER	
DHCP Enabled No Autoconfiguration Enabled Yes IPv4 Address	Physical Address	
Autoconfiguration Enabled : Yes IPv4 Address : <u>192.168.1.2(Preferred)</u> Subnet Mask : 255.255.255.255 Default Gateway : 0.0.0.0 DNS Servers : 10.76.77.50 NetBLOS over Tonin	DHCP Enabled No	
IPv4 Address	Autoconfiguration Enabled : Yes	
Subnet Mask	IPv4 Address	
Default Gateway	Subnet Mask	
DNS Servers	Default Gateway	
NetBIOS over Toning : Disabled	DNS Servers	
HOODIVO OVOI IODIDI I I I I I I I V DIOUDIOU	NetBIOS over Topip : Disabled	

ステップ3:PPPoEセッションの確立**をチェックするために、debug pppoe event**、debug pppoe error、**およびdebug ppp negotiation**を有効にします。debug radiusを有効にして、Radiusサーバ と交換さ**れたメッセージ**を表示することもできます。

BRAS#show debugging

PPP: PPP protocol negotiation debugging is on PPPoE: PPPoE protocol events debugging is on PPPoE protocol errors debugging is on Debug snippet:

BRAS# \*Sep 19 18:44:14.531: PPPoE 0: I PADI R:0050.56ad.7206 L:ffff.ffff.ffff Gi0/0/1.47

! Receiving PPPoE Active Discovery Initiation (PADI) broadcast packet from Windows Machine (MAC 0050.56ad.7206) on Router interface Gi0/0/1.47

\*Sep 19 18:44:14.531: Service tag: NULL Tag \*Sep 19 18:44:14.531: PPPoE 0: O PADO, R:d867.d99f.6601 L:0050.56ad.7206 Gi0/0/1.47

! Sending PPPoE Active Discovery Offer (PADO) unicast packet from Router interface Gi0/0/1.47 (MAC d867.d99f.6601 ) to Windows Machine (MAC 0050.56ad.7206)

\*Sep 19 18:44:14.531: Service tag: NULL Tag \*Sep 19 18:44:14.533: PPPoE 0: I PADR R:0050.56ad.7206 L:d867.d99f.6601 Gi0/0/1.47

! Receiving PPPoE Active Discovery Request (PADR) unicast packet from Windows Machine (MAC 0050.56ad.7206) on Router interface Gi0/0/1.47

\*Sep 19 18:44:14.533: Service tag: NULL Tag \*Sep 19 18:44:14.533: PPPoE : encap string prepared \*Sep 19 18:44:14.533: [76]PPPoE 63: Access IE handle allocated \*Sep 19 18:44:14.533: [76]PPPoE 63: AAA get retrieved attrs \*Sep 19 18:44:14.533: [76]PPPoE 63: AAA get nas port details \*Sep 19 18:44:14.533: [76]PPPoE 63: Error adjusting nas port format did \*Sep 19 18:44:14.533: [76]PPPoE 63: AAA get dynamic attrs \*Sep 19 18:44:14.533: [76]PPPoE 63: AAA unique ID 88 allocated \*Sep 19 18:44:14.533: [76]PPPoE 63: No AAA accounting method list \*Sep 19 18:44:14.534: [76]PPPoE 63: Service request sent to SSS \*Sep 19 18:44:14.534: [76]PPPoE 63: Created, Service: None R:d867.d99f.6601 L:0050.56ad.7206 Gi0/0/1.47 \*Sep 19 18:44:14.534: [76]PPPOE 63: State NAS\_PORT\_POLICY\_INQUIRY Event SSS MORE KEYS \*Sep 19 18:44:14.534: PPP: Alloc Context [7FE79EC0D8C8] \*Sep 19 18:44:14.534: ppp76 PPP: Phase is ESTABLISHING \*Sep 19 18:44:14.534: [76]PPPoE 63: data path set to PPP \*Sep 19 18:44:14.534: [76]PPPOE 63: Segment (SSS class): PROVISION

! We can also enable 'debug sss events' and 'debug sss error' to debug this stage

\*Sep 19 18:44:14.534: [76]PPPoE 63: State PROVISION\_PPP Event SSM PROVISIONED \*Sep 19 18:44:14.534: [76]PPPoE 63: O PADS R:0050.56ad.7206 L:d867.d99f.6601 Gi0/0/1.47

! Sending PPPoE Active Discovery Session Confirmation (PADS) unicast packets from Router interface Gi0/0/1.47 (MAC d867.d99f.6601 ) to Windows Machine (MAC 0050.56ad.7206)

\*Sep 19 18:44:14.534: [76]PPPoE 63: Unable to Add ANCP Line attributes to the PPPoE Authen attributes

! Access Node Control Protocol (ANCP) is configured between the Digital Subscriber Line Access Concentrator (DSLAM) and Broadband Remote Access Server (BRAS), which is used to aggregate traffic from multiple subscribers and deliver information for any application independently. More information related to ANCP could be found here. It is expected for the IOS to print this message even if ANCP is not enabled.

\*Sep 19 18:44:14.534: ppp76 PPP: Using vpn set call direction \*Sep 19 18:44:14.534: ppp76 PPP: Treating connection as a callin \*Sep 19 18:44:14.534: ppp76 PPP: Session handle[8800004C] Session id[76] \*Sep 19 18:44:14.534: ppp76 LCP: Event[OPEN] State[Initial to Starting] \*Sep 19 18:44:14.534: ppp76 PPP LCP: Enter passive mode, state[Stopped] \*Sep 19 18:44:14.539: ppp76 LCP: I CONFREQ [Stopped] id 0 len 21 \*Sep 19 18:44:14.539: ppp76 LCP: MRU 1480 (0x010405C8) \*Sep 19 18:44:14.539: ppp76 LCP: MagicNumber 0x61EB5A46 (0x050661EB5A46) \*Sep 19 18:44:14.539: ppp76 LCP: PFC (0x0702) \*Sep 19 18:44:14.539: ppp76 LCP: ACFC (0x0802) \*Sep 19 18:44:14.539: ppp76 LCP: Callback 6 (0x0D0306) \*Sep 19 18:44:14.539: ppp76 LCP: O CONFREQ [Stopped] id 1 len 18 \*Sep 19 18:44:14.539: ppp76 LCP: MRU 1492 (0x010405D4) \*Sep 19 18:44:14.539: ppp76 LCP: AuthProto PAP (0x0304C023) \*Sep 19 18:44:14.539: ppp76 LCP: MagicNumber 0x7B063BEA (0x05067B063BEA) \*Sep 19 18:44:14.539: ppp76 LCP: O CONFREJ [Stopped] id 0 len 7 \*Sep 19 18:44:14.539: ppp76 LCP: Callback 6 (0x0D0306) \*Sep 19 18:44:14.539: ppp76 LCP: Event[Receive ConfReq-] State[Stopped to REQsent] \*Sep 19 18:44:14.540: ppp76 LCP: I CONFACK [REQsent] id 1 len 18 \*Sep 19 18:44:14.540: ppp76 LCP: MRU 1492 (0x010405D4) \*Sep 19 18:44:14.540: ppp76 LCP: AuthProto PAP (0x0304C023) \*Sep 19 18:44:14.540: ppp76 LCP: MagicNumber 0x7B063BEA (0x05067B063BEA) \*Sep 19 18:44:14.540: ppp76 LCP: Event[Receive ConfAck] State[REQsent to ACKrcvd] \*Sep 19 18:44:14.540: ppp76 LCP: I CONFREQ [ACKrcvd] id 1 len 18 \*Sep 19 18:44:14.540: ppp76 LCP: MRU 1480 (0x010405C8) \*Sep 19 18:44:14.540: ppp76 LCP: MagicNumber 0x61EB5A46 (0x050661EB5A46) \*Sep 19 18:44:14.540: ppp76 LCP: PFC (0x0702) \*Sep 19 18:44:14.540: ppp76 LCP: ACFC (0x0802) \*Sep 19 18:44:14.540: ppp76 LCP: O CONFACK [ACKrcvd] id 1 len 18 \*Sep 19 18:44:14.540: ppp76 LCP: MRU 1480 (0x010405C8) \*Sep 19 18:44:14.540: ppp76 LCP: MagicNumber 0x61EB5A46 (0x050661EB5A46) \*Sep 19 18:44:14.540: ppp76 LCP: PFC (0x0702) \*Sep 19 18:44:14.540: ppp76 LCP: ACFC (0x0802) \*Sep 19 18:44:14.540: ppp76 LCP: Event[Receive ConfReq+] State[ACKrcvd to Open] \*Sep 19 18:44:14.541: ppp76 LCP: I IDENTIFY [Open] id 2 len 18 magic 0x61EB5A46MSRASV5.20 \*Sep 19 18:44:14.541: ppp76 LCP: I IDENTIFY [Open] id 3 len 24 magic 0x61EB5A46MSRAS-0-ADMIN-PC \*Sep 19 18:44:14.541: ppp76 LCP: I IDENTIFY [Open] id 4 len 24 magic 0x61EB5A46sPPY.X`I?Z5SWE}} \*Sep 19 18:44:14.541: ppp76 PPP: Queue PAP code[1] id[78] \*Sep 19 18:44:14.563: ppp76 PPP: Phase is AUTHENTICATING, by this end \*Sep 19 18:44:14.564: ppp76 PAP: Redirect packet to ppp76 \*Sep 19 18:44:14.564: ppp76 PAP: I AUTH-REQ id 78 len 11 from "cisco"

! Incoming Authentication Request from Windows Machine using User name "cisco"

\*Sep 19 18:44:14.564: ppp76 LCP: State is Open \*Sep 19 18:44:14.564: ppp76 PPP: Phase is AUTHENTICATING, Unauthenticated User \*Sep 19 18:44:14.564: RADIUS/ENCODE(0000088):Orig. component type = PPPoE \*Sep 19 18:44:14.564: RADIUS: DSL line rate attributes successfully added \*Sep 19 18:44:14.564: RADIUS/ENCODE: Skip encoding 0 length AAA Cisco vsa password \*Sep 19 18:44:14.564: RADIUS(0000088): Config NAS IP: 10.106.39.212 \*Sep 19 18:44:14.564: RADIUS(0000088): Config NAS IPv6: :: \*Sep 19 18:44:14.564: RADIUS(0000088): Config NAS IPv6: :: \*Sep 19 18:44:14.564: RADIUS/ENCODE: No idb found! Framed IP Addr might not be included \*Sep 19 18:44:14.564: RADIUS/ENCODE(0000088): acct\_session\_id: 125 \*Sep 19 18:44:14.564: RADIUS(0000088): Config NAS IP: 10.106.39.212 \*Sep 19 18:44:14.564: RADIUS(0000088): sending \*Sep 19 18:44:14.564: RADIUS(0000088): sending \*Sep 19 18:44:14.564: RADIUS(0000088): sending \*Sep 19 18:44:14.564: RADIUS(0000088): Send Access-Request to 10.106.39.253:1645 id 1645/106, len 147

! Sending an Access-Request to Radius Server at 10.106.39.253 on port 1645.

```
*Sep 19 18:44:14.564: RADIUS: authenticator C1 5B AA 62 1D E1 31 6C - 16 A5 CE 92 D6 9C 12 E7
*Sep 19 18:44:14.564: RADIUS: Framed-Protocol [7] 6 PPP [1]
*Sep 19 18:44:14.564: RADIUS: User-Name [1] 7 "cisco"
*Sep 19 18:44:14.564: RADIUS: User-Password [2] 18 *
*Sep 19 18:44:14.564: RADIUS: NAS-Port-Type [61] 6 Virtual [5]
*Sep 19 18:44:14.564: RADIUS: NAS-Port [5] 6 0
*Sep 19 18:44:14.564: RADIUS: NAS-Port-Id [87] 9 "0/0/1/1"
*Sep 19 18:44:14.564: RADIUS: Vendor, Cisco [26] 41
*Sep 19 18:44:14.564: RADIUS: Cisco AVpair [1] 35 "client-mac-address=0050.56ad.7206"
*Sep 19 18:44:14.564: RADIUS: Service-Type [6] 6 Framed [2]
*Sep 19 18:44:14.564: RADIUS: NAS-IP-Address [4] 6 10.106.39.212
*Sep 19 18:44:14.564: RADIUS: Acct-Session-Id [44] 10 "0000007D"
*Sep 19 18:44:14.564: RADIUS: Nas-Identifier [32] 12 "BRAS"
*Sep 19 18:44:14.564: RADIUS(00000088): Sending a IPv4 Radius Packet
*Sep 19 18:44:14.564: RADIUS(00000088): Started 5 sec timeout
*Sep 19 18:44:14.566: RADIUS: Received from id 1645/106 10.106.39.253:1645, Access-Accept, len
52
```

! Receiving an Access-Accep from Radius Server

```
*Sep 19 18:44:14.566: RADIUS: authenticator C0 0D 6C 33 F1 A3 04 27 - F0 C2 76 F5 54 FD E2 42
*Sep 19 18:44:14.566: RADIUS: Class [25] 32
*Sep 19 18:44:14.566: RADIUS: 4A 83 05 60 00 00 01 37 00 01 0A 6A 27 FD 01 D2 12 2E 98 D0 4F B0
00 00 00 00 00 00 00 14 [ J`7j'.0]
*Sep 19 18:44:14.566: RADIUS(00000088): Received from id 1645/106
*Sep 19 18:44:14.566: ppp76 PPP: Phase is FORWARDING, Attempting Forward
*Sep 19 18:44:14.568: [76]PPPOE 63: State LCP_NEGOTIATION Event SSS CONNECT LOCAL
*Sep 19 18:44:14.568: [76]PPPoE 63: Segment (SSS class): UPDATED
*Sep 19 18:44:14.568: [76]PPPOE 63: Segment (SSS class): BOUND
*Sep 19 18:44:14.568: [76]PPPoE 63: data path set to Virtual Acess
*Sep 19 18:44:14.569: [76]PPPoE 63: State LCP_NEGOTIATION Event SSM UPDATED
*Sep 19 18:44:14.569: Vi2.1 PPP: Phase is AUTHENTICATING, Authenticated User
*Sep 19 18:44:14.569: Vi2.1 PAP: O AUTH-ACK id 78 len 5
*Sep 19 18:44:14.569: Vi2.1 PPP: Reducing MTU to peer's MRU
*Sep 19 18:44:14.569: [76]PPPoE 63: AAA get dynamic attrs
*Sep 19 18:44:14.569: Vi2.1 PPP: Phase is UP
*Sep 19 18:44:14.569: Vi2.1 IPCP: Protocol configured, start CP. state[Initial]
*Sep 19 18:44:14.569: Vi2.1 IPCP: Event[OPEN] State[Initial to Starting]
*Sep 19 18:44:14.569: Vi2.1 IPCP: 0 CONFREQ [Starting] id 1 len 10
*Sep 19 18:44:14.569: Vi2.1 IPCP: Address 192.168.1.1 (0x0306C0A80101)
*Sep 19 18:44:14.569: Vi2.1 IPCP: Event[UP] State[Starting to REQsent]
*Sep 19 18:44:14.569: [76]PPPoE 63: State PTA_BINDING Event STATIC BIND RESPONSE
```

\*Sep 19 18:44:14.569: [76]PPPoE 63: Connected PTA
<snip>
\*Sep 19 18:44:14.572: Vi2.1 IPCP: Event[Receive ConfReq+] State[ACKrcvd to Open]
\*Sep 19 18:44:14.595: Vi2.1 IPCP: State is Open
\*Sep 19 18:44:14.595: PPPoE : ipfib\_encapstr prepared
\*Sep 19 18:44:14.596: Vi2.1 Added to neighbor route AVL tree: topoid 0, address 192.168.1.2
\*Sep 19 18:44:14.596: Vi2.1 IPCP: Install route to 192.168.1.2

! Installing route to PPPoE client

### BRAS#sh pppoe sess

### 1 session in LOCALLY\_TERMINATED (PTA) State

1 session total

Uniq	ID	PPPoE	RemMAC	Port	VT	VA	State
		SID	LocMAC			VA-st	Туре
	76	63	0050.56ad.7206	Gi0/0/1.47	10	Vi2.1	PTA
			d867.d99f.6601			UP	

BRAS#

BRAS#sh caller ip Line User IP Address Local Number Remote Number <-> Vi2.1 cisco 192.168.1.2 - - in BRAS# ping 192.168.1.2 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds: !!!!! Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/1 ms

# トラブルシュート

現在、この設定に関する特定のトラブルシューティング情報はありません。ただし、PPPおよび PPPoEに関連する標準的なトラブルシューティングテクニックは、関連するデバッグを使用して 適用できます。

# 関連情報

・ <u>テクニカル サポートとドキュメント – Cisco Systems</u>