PPPoE-sessie instellen vanaf een Windowsmachine naar een Cisco-router

Inhoud

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Inleiding

Dit document beschrijft de procedure om een Point-to-Point verbinding over Ethernet (PPPoE) tussen een Windows-machine (die fungeert als een PPPoE-client) en een Cisco-router die fungeert als een PPPoE-server.

Voorwaarden

Vereisten

Cisco raadt u aan om kennis te hebben van End-to-End Layer 1 connectiviteit is User Priority (UP).

Gebruikte componenten

Dit document is niet beperkt tot specifieke software- en hardware-versies.

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk live is, moet u de potentiële impact van elke opdracht begrijpen.

Configureren

Netwerkdiagram

Dit document gebruikt de netwerkinstellingen die in de afbeelding worden weergegeven:



bba-group pppoe BBA-TEST virtual-template 10

```
interface GigabitEthernet0/0/1.47
encapsulation dot1Q 1 native
pppoe enable group BBA-TEST
end
1
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
1
```

Windows Machine-configuraties en -instellingen

1

Voltooi deze stappen om een PPPoE-sessie van Windows machine te starten die als een PPPoEclient fungeert.

Stap 1. Open **Network and Sharing Center** en klik op **Stel een nieuwe verbinding of een nieuw netwerk** in zoals in de afbeelding.

Retwork and Sharing Center		- U ×
Control Panel - Netv	vork and Internet - Network and Sharing Center - 😭 Search Control Panel	
Elle Edit Yew Icols Help		
Control Panel Home	View your basic network information and set up connections	
Change adapter settings	🚛 See full map	
Change advanced sharing settings	ADMIN-PC Network 7 Internet	
	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, bill dband, 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	wing new wind speak mentantist providency of gets to exempt an exemption of the second s	
HomeGroup		
Internet Options		
Windows Pinewial		

Stap 2. Zoals in de afbeelding, selecteert u Connect met internet en klikt u op Volgende.



Stap 3. Selecteer sowieso een nieuwe verbinding, zoals in de afbeelding:

Retwork and Sharing Center	
🕐 😵 • Control Panel • Network and Internet • Network and Sharing Center 🔹 😭 Se	arch Control Panel 💋
File Edit View Tools Help	
Control Panel Home View your basic network information and set up connections	0
	See full map
Change adapter settings	
	Connect or disconnect
You are already connected to the Internet	
	nection 6
🔍 ——— 🥥	
	access point.
Browse the Internet now Set up a new connection anyway	ps.
See also	
HomeGroi	
Internet (1
Windows	

Stap 4. Selecteer Nee, maak een nieuwe verbinding, zoals in de afbeelding:



Stap 5. Zoals in de afbeelding, klik op Broadband (PPPoE):

Note: Notice Panel - Network and Internet - Network and Sharing Center File Edit View Tools Heip Control Panel Home View your basic network information and set up connections Control Panel Home View your basic network information and set up connections Control Panel Home View your basic network information and set up connections Control Panel Home View your basic network information and set up connections Control Panel Home Connect to the Internet Connect to the Internet How do you want to connect? Image: Connect using DSL or cable that requires a user name and password. Connect using DSL or cable that requires a user name and password.	Network and Shar	ing Center			_O×
File Edit View Tools Help Control Panel Home View your basic network information and set up connections See full map Change adapter settings Image Image See full map Change adapter settings Image Image Image Image Change adapter settings Image Image	00 1000	ontrol Panel • Network and Internet • Network and Sharing Center •	Search	Control Panel	2
Control Panel Home View your basic network information and set up connections Change adapter settings See full map Change all Connect to the Internet Image all Image all	File Edit View To	ools Help			
Change adapter settings See full map Change adapter settings See full map Change a Connect to the Internet Connect to the Internet How do you want to connect? Broadband (PPPoE) Connect using DSL or cable that requires a user name and password.	Control Panel Home	View your basic network information and set up connections			0
Change a Connect to the Internet	Change adapter se	ttings 📃 🌗	- 🎱	See full map	
Connect to the Internet How do you want to connect? Broadband (PPPoE) Connect using DSL or cable that requires a user name and password.	Change a 🐴 Conr	nect to the Internet	_		
How do you want to connect? Broadband (PPPoE) Connect using DSL or cable that requires a user name and password.	ه 🕒	Connect to the Internet			
How do you want to connect?				Connect or disconnect	
Broadband (PPPoE) Connect using DSL or cable that requires a user name and password.		iow do you want to connect?			
Broadband (PPPot) Connect using DSL or cable that requires a user name and password.				hection 6	
		Broadband (PPPoE) Connect using DSL or cable that requires a user name and password.			
access point.				access pone.	
p.				ps.	
Show connection options that this computer is not set up to use		Show connection options that this computer is not set up to use			
Help me choose	See also	Help me choose			
Internet (Internet			1	
Windows	Windows		Cancel		

Stap 6. Zoals in de afbeelding, voert u de **gebruikersnaam, het wachtwoord** en een **verbindingsnaam in** en klikt u op **Connect.**

The work, and sharing center	
💽 💱 • Control Panel • Network and Internet • Network and Sharing Center 🔹 😫 Search Control Panel	2
File Edit View Tools Help	
Control Panel Home View your basic network information and set up connections	0
See ful map	
Change adapter settings	
Connect to the Internet	
Connect or disconnect	
Type the information from your Internet service provider (ISP)	
hection 6	
User name:	
Password: [Password your ISP gave you]	
Show characters	
☐ <u>B</u> emember this password access point.	
00005-1150	
Connection name:	
Allow other people to use this connection	
This option allows anyone with access to this computer to use this connection.	
See also I don't have an ISP	
HomeGro	
Internet (
Windows Cancel	

Hiermee wordt een PPPoE-sessie naar de server gestart. Controleer het verificatiegedeelte zoals in de afbeelding:

Network and S	haring Center			_ 🗆 🗵
00 1	Control Panel 🔹 Network and Internet 🔹 Network and Sharing Center 🔹 🖉	Search Con	trol Panel	2
File Edit View	Tools Help			
Control Panel H	ome View your basic network information and set up connections			0 -
Change adapte	r settings 😥 🔔 🙀 🛶		See full map	- 1
Change a 📢 🕻	onnect to the Internet			
0	left Connect to the Internet			- 1
		Co	nnect or disconnect	
	Testing your Internet connection			
		~	tion 6	
	🛀 📖 🚵			- 1
		est		
			and a sink	
		00	cess ponc.	
See also				
HomeGrov		<u>ن</u> ه.		
Internet (30,	Cancel		
Windows	7 -			

Verifiëren

Stap 1. Open opnieuw **het** tabblad **Networks**, selecteer het netwerk (aangeduid als PPPOE-USER in dit voorbeeld) en controleer de status. Klik op **Connect** om een sessie te starten nadat u de naam en het wachtwoord van de gebruiker hebt ingevoerd, zoals in de afbeelding wordt weergegeven:

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		
	A		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

Network and Sharing Center				_ 🗆 🗙
Control Panel - Net	twork and Internet + Network and Sharing Ce	nter	 Search Control Panel 	2
File Edit View Tools Help				
Control Panel Home	View your basic network information	and set up connection	ons	
Change adapter settings	M	- 📭 -	See full map	
Change advanced sharing settings	ADMIN-PC (This computer)	Network 7	Internet	
	View your active networks		Connect or disconnect	
	Connect PPPOE-USER	3	ss type: Internet	
		-	ections: 🔋 Local Area Connection 6	
			rection; or set up a router or access point.	
	User name: cisco		network connection.	
	Password:		rrs, or change sharing settings.	
l⊋.	I Save this user name and password for	the following users:		
	C Me ogly		sing information.	
See also	How Anyone who uses this computer			
HomeGroup	Connect Connect Doors	ا مديد]] منه		
Internet Options	ConnectCanceiPigpe	Teb		
Windows Firewall				

Stap 2. Open commando prompt en voer **ipfig/alle** opdracht uit om het onderhandelde IP-adres te controleren, zoals in de afbeelding wordt getoond:

PPP adapter PPPOE-USER:	
Connection-specific DNS Suffix . : Description	
Physical Address.	
Autoconfiguration Enabled : Yes	
Subnet Mask	
DNS Servers	
NetBlus over lcpip Disabled	

Stap 3. Schakel **de optie PPPoE-gebeurtenis** in, **debug** van pop-upfout en **debug** van PPPoEsessieonderhandeling om te controleren. We kunnen ook **debug Straal** inschakelen om berichten te zien die worden uitgewisseld met Radius-server.

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
                                                                                   Type
      76
             63 0050.56ad.7206 Gi0/0/1.47
                                                                                   PTA
                                                                  10 Vi2.1
                  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
```

Problemen oplossen

Er is momenteel geen specifieke troubleshooting-informatie beschikbaar voor deze configuratie. U kunt echter de standaard technieken voor het oplossen van problemen met betrekking tot PPP en PPPoE toepassen met hulp van verwante bronnen.

Gerelateerde informatie

• Technische ondersteuning en documentatie - Cisco Systems