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Introduction

This document describes the procedure to configure a Point-to-Point connection over Ethernet (PPPoE) between a Windows Machine (that acts as a PPPoE Client) and a Cisco Router which acts as a PPPoE Server.

Prerequisites

Requirements

Cisco recommends that you have knowledge of End-to-End Layer 1 connectivity is User Priority (UP).

Components Used

This document is not restricted to specific software and hardware versions.

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. If your network is live, make sure that you understand the potential impact of any command.

Configure

Network Diagram

This document uses the network setup which is shown in the image:



Configurations

BRAS Configuration

```
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 dot1Q 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 Machine Configurations and Settings

Complete these steps to initiate PPPoE session from Windows Machine that acts as a PPPoE Client.

Step 1. Open **Network and Sharing Center** and click **Set up a new connection or network** as shown in the image.

Retwork and Sharing Center		
🕜 🖓 🔹 Control Panel - Netr	work and Internet - Network and Sharing Center - 😧 Search Control Panel	
Elle Edit Yew Iools Help		
Control Panel Home	View your basic network information and set up connections	
Change adapter settings	ស 🚺 See ful 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, 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		
HomeGroup		
Internet Options		
WELDOWS FIT OWNER		

Step 2. As shown in the image, select Connect to the Internet and click Next.



Step 3. Select Set up a new connection anyway, as shown in the image:

Retwork and Sharing Center	
🕐 💱 • Control Panel • Network and Internet • Network and Sharing Center 🔹 😰 Search	h Control Panel 🗾 😢
File Edit View Tools Help	
Control Panel Home View your basic network information and set up connections	0
Change adapter settings 📃 🧾	See full map
Change a 📢 Connect to the Internet	<u><</u>
G 😔 Connect to the Internet	
	Connect or disconnect
You are already connected to the Internet	
	hection 6
🔍 ——— 🥥	<u> </u>
	access point.
Browse the Internet now	
Set up a new connection anyway	¥.
See also	
HomeGrov	
Internet (
Windows	

Step 4. Select No, create a new connection, as shown in the image:

Network a	and Sharing Center				_O×
00	😵 🔹 Control Panel 🔹 N	etwork and Internet - Network and Sharing Center	🔹 🔛 Search	Control Panel	2
File Edit	View Tools Help anel Home	View your basic network information and set up connections	0	See ful map	0
Change a Change a	dapter settings Connect to the In Connect to the In	ternet		1	
	Do you want to	o use a connection that you already have?		Connect or disconnect	
		te a new connection			
	×.	PPPoE-FINAL WAN Miniport (PPPOE)		access point.	
				p.	
See also					
HomeGro					
Windows		6	Vext Cancel		

Step 5. As shown in the image, click on Broadband (PPPoE):

Network and Sharing Center			_O×
COC 😫 • Control Panel • Network and Internet • Network and Sharing Center •	Search Co	ontrol Panel	2
File Edit View Tools Help			
Control Panel Home View your basic network information and set up connections			0
Change adapter settings Image	()	See full map	
Change a 🐢 Connect to the Internet			
G 😔 😔 Connect to the Internet		oppert or disconnect	
How do you want to connect?		antina d	
Broadband (PPPoE)		eccon o	
Connect using DSL or cable that requires a user name and password.			
6			
	_	access point.	
		s.	
Show connection options that this computer is not set up to use			
See also Help me choose			
Internet (
Windows	Cancel		

Step 6. As shown in the image, enter the **User name, Password** and a **Connection name,** and click **Connect.**

Network a	and Sharing Center				
00	😧 🔹 Control Panel 👻 Network and	Internet + Network and Sharing Center	÷ 🖸	Search Control Panel	2
File Edit	View Tools Help				
Control Pa	anel Home View	your basic network information and set up con	nections		0
Change a	dapter settings	A		See full map	
Change a	Connect to the Internet				
	🕝 👴 Connect to the Inter	net			
				Connect or disconnect	
	Type the information fro	om your Internet service provider (ISP)			
				hection 6	
	User name:	cisco			
	Password:	[Password your ISP gave you]			
		Show characters			
		<u>Bernember this password</u>		access point.	
	Constant and and a	9201-30999	1		
	Connection name:	Processer			
	Allow other peop	le to use this connection		p s.	
	This option allow	s anyone with access to this computer to use this c	onnection.		
	I dan't have an 100				
See also	Loon Chave an LSP				
Internet (
Windows			Connect Ca	ncel	
			*0		

This initiates a PPPoE session towards the server. Check the verify section as shown in the image:

Retwork and Sharing Center	
🕥 🖓 • Control Panel • Network and Internet • Network and Sharing Center 🔹 😝 Search	Control Panel
File Edit View Tools Help	
Control Panel Home View your basic network information and set up connections	⊗ <u></u>
Change adapter settings	See full map
Change a 📢 Connect to the Internet	l I
Connect to the Internet	
	Connect or disconnect
Testing your Internet connection	
	nection 6
i i i i i i i i i i i i i i i i i i i	ess
	access point.
See also HomeGrov Internet (Skip, Cancel	j z .
Windows	

Verify

Step 1. Open **Networks** tab again,select the network (named PPPOE-USER in this example) and verify the status. Click **Connect** to initiate a session after you enter User name and Password, as shown in the image:

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 - Nel	twork and Internet + Network and Sharing (Center	👻 🛃 🛛 Search Con	itrol Panel	2
File Edit View Tools Help					
Control Panel Home	View your basic network information	on and set up connec	tions		0
Change adapter settings	M	— 🌆 ·	🎱	See full map	
Change advanced sharing settings	ADMIN-PC (This computer)	Network 7	Internet		
	View your active networks		Co	nnect or disconnect	
	Tonnect PPPOE-USER		×		
			ections: U Local Area Connec	ction 6	
			vection; or set up a router or ac	cess point.	
	User name: Cisco		network connection.		
	Password:		rs, or change sharing settings.		
R	Save this user name and password to Contract the same set of the same set o	or the following users:			
See also	Me ogy Me converter		sing information.		
HomeGroup	. Bitare uno dies cas compare				
Internet Options	Connect Cancel Pro	perties <u>H</u> elp			
Windows Firewall					

Step 2. Open command prompt and run **ipconfig /all** command to check the negotiated IP address, as shown in the image:

PPP adapter PPPOE-USER:		
Connection-specific DNS Suffix Description		PPPOE-USER
Autoconfiguration Enabled IPv4 Address		No Ves 192.168.1.2(Preferred)
Default Gateway	-	255.255.255.255 0.0.0.0 10.76.77.50
NetBIOS over Tcpip	. :	Disabled

Step 3. Enable **debug pppoe event**, **debug pppoe error** and **debug ppp negotiation** to check PPPoE session establishment. We can also enable **debug radius** to see messages exchanged with 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
                                                                       UP
                  d867.d99f.6601
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.
```

There is currently no specific troubleshooting information available for this configuration. However, we can apply standard troubleshooting techniques related to PPP and PPPoE with help of related

Related Information

Troubleshoot

11111

debugs.

<u>Technical Support & Documentation - Cisco Systems</u>

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