Einrichten einer PPPoE-Sitzung von einem Windows-Computer zu einem Cisco Router

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Einführung

Dieses Dokument beschreibt das Verfahren zum Konfigurieren einer Point-to-Point-Verbindung über Ethernet (PPPoE) zwischen einem Windows-Computer (der als PPPoE-Client fungiert) und einem Cisco Router, der als PPPoE-Server fungiert.

Voraussetzungen

Anforderungen

Cisco empfiehlt, dass Sie die End-to-End-Layer-1-Anbindung als Benutzerpriorität (User Priority, UP) kennen.

Verwendete Komponenten

Dieses Dokument ist nicht auf bestimmte Software- und Hardwareversionen beschränkt.

Die Informationen in diesem Dokument wurden von den Geräten in einer bestimmten Laborumgebung erstellt. Alle in diesem Dokument verwendeten Geräte haben mit einer leeren (Standard-)Konfiguration begonnen. Wenn Ihr Netzwerk in Betrieb ist, stellen Sie sicher, dass Sie die potenziellen Auswirkungen eines Befehls verstehen.

Konfigurieren

Netzwerkdiagramm

In diesem Dokument wird das Netzwerk-Setup verwendet, das im Bild angezeigt wird:



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-Systemkonfigurationen und -einstellungen

1

Führen Sie diese Schritte aus, um eine PPPoE-Sitzung von einem Windows-Computer aus zu starten, der als PPPoE-Client fungiert.

Schritt 1: Öffnen Sie **Netzwerk- und Freigabecenter**, und klicken Sie auf **Neue Verbindung oder neues Netzwerk einrichten**, wie im Bild gezeigt.

| Network and Sharing Center | | |
|----------------------------------|----------------------------------------------------------------------------------------------|-----|
| Control Panel - Net | work and Internet • Network and Sharing Center • 🚱 Search Control Panel | - 2 |
| Ele Edit View Icols Help | | |
| Control Panel Home | View your basic network information and set up connections | |
| Channe adapter cettions | 🕼 📭 🙆 See full map | |
| Change advanced charing settings | ······································ | |
| Change donanced sharing seconds | ADMIN-PC Network 7 Internet (This computer) | |
| | View your active networks Connect or disconnect | |
| | Access type: Tokenat | |
| | Work network Connections: | |
| | | |
| | Change your networking settings | |
| | Set up a new connection or network | |
| | Set up a wireless, bi dal-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 homeoroup and sharing options | |
| | Access files and printers located on other network computers, or change sharing settings. | |
| | The block of book and book | |
| | Discnose and repair network problems, or get troubleshooting information. | |
| See also | sense none on a regime internet or ownering on gets to settempt needer gets to internet. | |
| HomeGroup | | I |
| Internet Options | | |
| Windows Firewall | | I |
| | | |

Schritt 2: Wählen Sie, wie im Bild gezeigt, Verbindung mit dem Internet herstellen aus, und klicken Sie auf Weiter.

| Network a | and Sharing Center | | _ [] × |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------|
| 00 | 💱 🝷 Control Panel 👻 Network and Internet 👻 Network and Sharing Center 💿 👻 🚱 | Search Control Panel | 2 |
| File Edit Control Pa Change a | View Tools Help anel Home View your basic network information and set up connections dapter settings | See full map | |
| Change a | Set Up a Connection or Network | Connect or disconnect | |
| | Connect to the Internet Set up a wireless, broadband, pr dial-up connection to the Internet. | nection 6 | |
| | Set up a new network Configure a new router or access point. Connect to a workplace Set up a dial-up or VPN connection to your workplace. | access point. | |
| | Set up a dial-up connection Connect to the Internet using a dial-up connection. | 25. | |
| See also | | | |
| Internet (| | | |
| Windows | Next C | Cancel | |

Schritt 3: Wählen Sie Wie im Bild gezeigt trotzdem eine neue Verbindung einrichten aus:

| 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 | 0 |
| | See full map |
| Change adapter settings | al |
| Competition to the Internet | 1 |
| | 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 Set up a new connection anyway | 25. |
| See also | |
| HomeGrov | 1 |
| Internet Cancel | |
| WERDING | _ |

Schritt 4: Wählen Sie Nein, eine neue Verbindung erstellen, wie im Bild gezeigt:

| Network 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 basis network information and set up connections | 0 |
| view your basic network information and set up connections | See full map |
| Change adapter settings | al |
| Change a Connect to the Internet | |
| Connect to the Internet | Connect or disconnect |
| Do you want to use a connection that you already have? | |
| bo you want to use a connection that you an easy have? | bertino 6 |
| | |
| No, create a new connection | |
| C Yes, I'll choose an gristing connection | |
| | access point. |
| PPPoE-FINAL WAN Minipart (PPPOF) | |
| | |
| | |
| | l |
| | p. |
| | |
| See also | |
| HomeGrov | |
| Internet (Next Cancel | |
| Windows | |

Schritt 5: Klicken Sie, wie im Bild gezeigt, auf Broadband (PPPoE):

| Network and Sharing Center | _0× |
|--------------------------------------------------------------------------------------|------------------------|
| 🕥 🔆 • Control Panel • Network and Internet • Network and Sharing Center 🔹 😰 Set | 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 a section of the Internet | |
| Connect to the Internet | |
| | Connect or disconnect |
| How do you want to connect? | |
| | nection 6 |
| Broadband (PPPoE) Connect using DSL or cable that requires a user name and password. | |
| | |
| | |
| | access point. |
| | |
| | |
| | |
| | p. |
| | |
| See also Help me choose | |
| HomeGrov | |
| Internet Cancel | 1 |
| Windows | |

Schritt 6: Geben Sie, wie im Bild gezeigt, den Benutzernamen, das Kennwort und einen Verbindungsnamen ein, und klicken Sie auf Verbinden.

| Network a | nd Sharing Center | | | | =OX |
|-------------|------------------------------------|-------------------------------------------------|---------------------|-----------------------|-----|
| 00 | 😵 🔹 Control Panel 👻 Network and In | ternet + Network and Sharing Center | ÷ 🔛 | Search Control Panel | 2 |
| File Edit 1 | view Tools Help | | | | |
| Control Pa | nel Home View yo | ur basic network information and set up con | nections | | |
| Change at | dapter settings | 🍂 —— 🦫 | | See full ma | P |
| Change a | Connect to the Internet | | 1 | - IX | |
| | 🕝 😔 Connect to the Interne | t | | | |
| | | | | Connect or disconnect | t |
| | Type the information from | your Internet service provider (ISP) | | | |
| | | Leirea | 1 | nection 6 | |
| | User name: | lenco | | | |
| | Password: | [Password your ISP gave you] | 1 | | - |
| | | Show characters | | | |
| | | <u>Bemember this password</u> | | access point. | |
| | | DODOG USED | | | |
| | Connection name: | PPPOE-Usen | | | |
| | | | | | |
| | Allow other people i | ours this connection | | 5 . | |
| | This option allows a | wone with access to this computer to use this o | onnection. | | |
| | | , | | | |
| See also | I don't have an ISP | | | | |
| HomeGro | | | | | |
| Internet (| | | <u>C</u> onnect, Ca | ncel | |
| Windows | | | 13 | | |

Dadurch wird eine PPPoE-Sitzung zum Server gestartet. Überprüfen Sie den Abschnitt Überprüfen, wie im Bild gezeigt:

| Network a | nd Sharing Center | _O× |
|------------|---------------------------------------------------------------------------------|-----------------------|
| 00 | 😵 🔹 Control Panel 🔹 Network and Internet 🔹 Network and Sharing Center 🔹 🙀 Searc | h Control Panel 💋 |
| File Edit | riew Tools Help | |
| Control Pa | nel Home View your basic network information and set up connections | • |
| | | See full map |
| Change a | Sapter settings | al l |
| Change a | Connect to the Internet | 2 |
| | | Connect or disconnect |
| | Testing your Internet connection | |
| | | nection 6 |
| | | |
| | · · · · · · · · · · · · · · · · · · · | |
| | | ess |
| | | |
| | | |
| | | |
| | | |
| | | access point. |
| | | |
| | | |
| See also | | |
| HomeGro | | ps. |
| Internet (| Skip, Cancel | |
| Windows | | |

Überprüfen

Schritt 1: Öffnen Sie erneut die Registerkarte **Netzwerke**, wählen Sie das Netzwerk aus (in diesem Beispiel als PPPOE-USER bezeichnet), und überprüfen Sie den Status. Klicken Sie auf **Connect**, um eine Sitzung zu starten, nachdem Sie Benutzername und Kennwort eingegeben haben, wie im Bild gezeigt:



| Network and Sharing Center | | | | -OX |
|----------------------------------|----------------------------------------------|----------------------|---------------------------------------------|-----|
| CON V - Control Panel - Nel | twork and Internet + Network and Sharing Cen | ter | 👻 🔄 Search Control Panel | 2 |
| File Edit View Tools Help | | | | |
| Control Panel Home | View your basic network information | and set up connectio | ans | |
| 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 | |
| | Tonnect PPPOE-USER | 2 | ss type: Internet | |
| | | | ections: 🤤 Local Area Connection 6 | |
| | | | ection; or set up a router or access point. | |
| | User name: Cisco | | network connection. | |
| | Password: | _ | ers, or change sharing settings. | |
| L≥ | Save this user name and password for t | he following users: | | |
| | C Me oply | | sing information. | |
| See also | Sec Anyone who uses this computer | | | |
| HomeGroup | Count Count Pour | en II une I | | |
| Internet Options | Lonnect Cancel Ptgper | es Help | | |
| Windows Firewall | | | | |

Schritt 2: Öffnen Sie die Eingabeaufforderung, und führen Sie den Befehl **ipconfig /all** aus, um die ausgehandelte IP-Adresse zu überprüfen, wie im Bild gezeigt:

| PPP adapter PPPOE-USER: | | | |
|-------------------------------------------------------|---|---------------------------------------------------|--|
| Connection-specific DNS Suffix Description | - | PPPOE-USER No Yes 192.168.1.2(Preferred) | |
| Default Gateway DNS Servers NetBIOS over Tcpip. | | 0.0.0.0 10.76.77.50 Disabled | |

Schritt 3: Aktivieren Sie **Debug-PPP-Ereignis, Debugging-PoE-Fehler** und **Debug-PPP-Aushandlung**, um die PPPoE-Sitzungseinrichtung zu überprüfen. Wir können auch den **Debugradius** aktivieren, um Meldungen anzuzeigen, die mit Radius-Servern ausgetauscht werden.

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: O 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
```

Fehlerbehebung

Für diese Konfiguration sind derzeit keine spezifischen Informationen zur Fehlerbehebung verfügbar. Wir können jedoch standardmäßige Fehlerbehebungsverfahren für PPP und PPPoE mithilfe von zugehörigen Debugging-Verfahren anwenden.

Zugehörige Informationen

Technischer Support und Dokumentation - Cisco Systems