# Konfigurieren des Cisco Routers und der VPN-Clients mithilfe von PPTP und MPPE

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# **Einführung**

Dieses Dokument beschreibt die Konfiguration eines Cisco IOS<sup>®</sup> Routers, der PPTP-Clients (Point-to-Point Tunneling Protocol) von Windows 2000 und MPPE (Microsoft Point-to-Point Encryption Protocol) terminiert.

Weitere Informationen zur PPTP-Authentifizierung mit dem Cisco Secure Access Control Server (ACS) finden Sie unter Konfigurieren der PPTP-Authentifizierung für Windows-Router.

# **Voraussetzungen**

#### **Anforderungen**

Für dieses Dokument bestehen keine speziellen Anforderungen.

#### Verwendete Komponenten

Die Informationen in diesem Dokument basieren auf den Versionen Software und Hardware:

- Cisco 2621 Router mit Cisco IOS Software-Version 12.2
- Microsoft Windows 2000

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.

#### **Netzwerkdiagramm**

In diesem Dokument wird die folgende Netzwerkeinrichtung verwendet:



#### **Konventionen**

Weitere Informationen zu Dokumentkonventionen finden Sie unter <u>Cisco Technical Tips</u> <u>Conventions</u> (Technische Tipps zu Konventionen von Cisco).

### **PPTP-Router-Konfiguration**

Diese IOS-Befehle gelten für alle Plattformen, die PPTP unterstützen.

```
2621#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
!--- Enable virtual private dial-up networking. 2621(config)#vpdn enable
!--- Enters VPDN group configuration mode for the specified VPDN group. 2621(config)#vpdn-group
1
!--- Enters VPDN accept-dialin configuration mode !--- and enables the router to accept dial-in
requests. 2621(config-vpdn)#accept-dialin
!--- Specifies which PPTP protocol is used. 2621(config-vpdn-acc-in)#protocol pptp
!--- Specifies the virtual template that is used !--- in order to clone the virtual access
interface. 2621(config-vpdn-acc-in)#virtual-template 1
2621(config-vpdn-acc-in)#exit
2621(config)#ip local pool test 192.168.1.1 192.168.1.250
!--- Create virtual-template interface used for cloning !--- virtual-access interfaces with the
use of address pool test !--- with Challenge Authentication Protocol (CHAP) authentication, PAP,
and MS-CHAP. 2621(config)#interface virtual-template 1
2621(config-if)#encapsulation ppp
2621(config-if) #peer default ip address pool test
2621(config-if) #ip unnumbered FastEthernet0/0
2621(config-if) #no keepalive
2621(config-if) #ppp encrypt mppe auto
2621(config-if) #ppp authentication pap chap ms-chap
Cisco Router 2621
```

2621#**show run** Building configuration...

```
Current configuration : 1566 bytes
1
version 12.2
service timestamps debug datetime msec localtime
service timestamps log datetime msec localtime
no service password-encryption
!
hostname 2621
!
boot system flash
logging queue-limit 100
enable secret 5 $1$dGFC$VA28yOWzxlCKyj1dq8SkE/
!
username cisco password 0 cisco123
username client password 0 testclient
ip subnet-zero
ip cef
!
1
no ip domain lookup
ip domain name cisco.com
vpdn enable
!--- Enable VDPN. ! vpdn-group 1
!--- Default PPTP VPDN group. accept-dialin
 protocol pptp
  virtual-template 1
!
!
1
!
!
1
1
!
1
voice call carrier capacity active
!
1
1
!
1
1
!
no voice hpi capture buffer
no voice hpi capture destination
!
!
mta receive maximum-recipients 0
1
1
controller T1 0/0
 framing sf
linecode ami
!
controller T1 0/1
framing sf
linecode ami
!
!
1
interface Loopback0
```

```
ip address 10.100.100.1 255.255.255.0
 ip nat inside
!
interface FastEthernet0/0
ip address 172.16.142.191 255.255.255.0
no ip route-cache
no ip mroute-cache
duplex auto
 speed auto
!
interface FastEthernet0/1
ip address 10.130.13.13 255.255.0.0
duplex auto
speed auto
!
!--- Create virtual-template interface used for cloning
!--- virtual-access interfaces with the use of address
pool test !--- with CHAP authentication, PAP, and MS-
CHAP. interface Virtual-Template1
ip unnumbered FastEthernet0/0
peer default ip address pool test
no keepalive
ppp encrypt mppe auto
ppp authentication pap chap ms-chap
!--- Create IP pool named test and specify IP range. ip
local pool test 192.168.1.1 192.168.1.250
no ip http server
no ip http secure-server
ip classless
ip route 0.0.0.0 0.0.0.0 172.16.142.1
1
ip pim bidir-enable
1
!
!
call rsvp-sync
1
!
mgcp profile default
1
dial-peer cor custom
1
1
1
!
!
line con 0
exec-timeout 0 0
line aux 0
line vty 0 4
password cisco
login
!
!
end
2621#
```

# **Router-Konfiguration mit MPPE und MS-CHAP**

```
!--- Enter configuration commands, one per line. !--- End with CNTL/Z. 2621(config)#interface
Virtual-Template1
2621(config-if)#ppp authentication ms-chap
2621(config-if)#ppp encrypt mppe ?
128 128 Bit Encryption only
40 40 Bit Encryption only
auto Will offer 40 and 128 bit if available
2621(config-if)#ppp encrypt mppe auto
2621(config-if)#ppp encrypt mppe auto required
```

### Einstellungen und Konfiguration von Windows 2000 VPN (PPTP)

Gehen Sie wie folgt vor:

1. Wählen Sie Start > Einstellungen > Netzwerk- und DFÜ-Verbindungen > Neue Verbindung herstellen



2. Wenn das Fenster Network Connection Wizard (Assistent für Netzwerkverbindungen) angezeigt wird, wählen Sie Network Connection Type (Netzwerkverbindungstyp) und Connect to a private network through the Internet (Verbindung mit einem privaten Netzwerk über das Internet herstellen)



3. Wählen Sie Diese erste Verbindung automatisch wählen



4. Geben Sie eine Zieladresse im Feld Host oder IP-Adresse an, und klicken Sie auf



5. Wählen Sie **Start > Einstellungen > Netzwerk und DFÜ-Verbindungen**, und wählen Sie die kürzlich konfigurierte Verbindung



6. Wenn dieses Fenster angezeigt wird, wählen Sie **Eigenschaften > Sicherheit**, um die Option richtig



7. Wählen Sie **Erweitert (Kundeneinstellungen)**, wählen Sie **Einstellungen**, und wählen Sie die entsprechende Verschlüsselungsstufe (Datenverschlüsselung) und Authentifizierung (Zulassen dieser Protokolle)





8. Wählen Sie unter Networking (Typ des VPN-Servers, der aufgerufen wird) **PPTP aus** und klicken Sie auf



9. Das Fenster Benutzername und Kennwort überprüfen wird



10. Das Fenster Computer im Netzwerk registrieren wird



11. Das Fenster Verbindungseigenschaften wird angezeigt.



12. In diesen Fenstern wird der Verbindungsstatus





# <u>Überprüfen</u>

Dieser Abschnitt enthält Informationen, mit denen Sie die ordnungsgemäße Funktion Ihrer Konfiguration bestätigen können.

Das <u>Output Interpreter Tool</u> (nur <u>registrierte</u> Kunden) (OIT) unterstützt bestimmte **show**-Befehle. Verwenden Sie das OIT, um eine Analyse der **Ausgabe des** Befehls **show anzuzeigen**.

- show debug Zeigt aktuell aktivierte Debugbefehle an, um Fehler zu beheben.
- show user: Zeigt die aktuell angemeldeten Benutzer und deren Status an
- show ip route connected: Zeigt den aktuellen Status der Routing-Tabelle an
- show vpdn Zeigt Informationen über aktiven L2TP (Layer 2 Tunnel Protocol)- oder L2F (Layer 2 Forwarding) Protocol-Tunnel und Nachrichtenbezeichner in einem Virtual Private Dialup Network (VPDN) an.

Dies ist die Beispielausgabe des Befehls show debug.

```
2621#show debug
ppp:
        PPP authentication debugging is on
        PPP protocol negotiation debugging is on
```

VPN:

VPDN events debugging is on Dies ist die Debug-Ausgabe mit der ursprünglichen PPTP-Konfiguration.

```
2621#
*Mar 5 02:16:25.675: ppp2 PPP: Using vpn set call direction
*Mar 5 02:16:25.675: ppp2 PPP: Treating connection as a callin
     5 02:16:25.675: ppp2 PPP: Phase is ESTABLISHING, Passive Open
*Mar
*Mar 5 02:16:25.675: ppp2 LCP: State is Listen
*Mar 5 02:16:27.663: ppp2 LCP: TIMEout: State Listen
*Mar 5 02:16:27.663: ppp2 PPP: Authorization required
*Mar 5 02:16:27.663: ppp2 LCP: O CONFREQ [Listen] id 1 len 14
*Mar 5 02:16:27.663: ppp2 LCP:
                                  AuthProto PAP (0x0304C023)
*Mar
     5 02:16:27.663: ppp2 LCP:
                                  MagicNumber 0x1658CF62 (0x05061658CF62)
*Mar 5 02:16:27.667: ppp2 LCP: I CONFACK [REQsent] id 1 len 14
*Mar 5 02:16:27.667: ppp2 LCP: AuthProto PAP (0x0304C023)
*Mar 5 02:16:27.667: ppp2 LCP: MagicNumber 0x1658CF62 (0x05061658CF62)
*Mar 5 02:16:27.695: ppp2 LCP: I CONFREQ [ACKrcvd] id 1 len 44
*Mar 5 02:16:27.695: ppp2 LCP: MagicNumber 0x131A2427 (0x0506131A2427)
*Mar 5 02:16:27.695: ppp2 LCP: PFC (0x0702)
*Mar 5 02:16:27.695: ppp2 LCP: ACFC (0x0802)
*Mar 5 02:16:27.695: ppp2 LCP: Callback 6 (0x0D0306)
*Mar 5 02:16:27.695: ppp2 LCP: MRRU 1614 (0x1104064E)
*Mar 5 02:16:27.695: ppp2 LCP: EndpointDisc 1 Local
*Mar 5 02:16:27.699: ppp2 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6)
*Mar 5 02:16:27.699: ppp2 LCP:
                                  (0x897EAE00000002)
*Mar 5 02:16:27.699: ppp2 LCP: O CONFREJ [ACKrcvd] id 1 len 11
*Mar 5 02:16:27.699: ppp2 LCP: Callback 6 (0x0D0306)
*Mar
     5 02:16:27.699: ppp2 LCP:
                                  MRRU 1614 (0x1104064E)
*Mar 5 02:16:27.703: ppp2 LCP: I CONFREQ [ACKrcvd] id 2 len 37
*Mar 5 02:16:27.703: ppp2 LCP: MagicNumber 0x131A2427 (0x0506131A2427)
*Mar 5 02:16:27.703: ppp2 LCP: PFC (0x0702)
*Mar 5 02:16:27.707: ppp2 LCP: ACFC (0x0802)
*Mar 5 02:16:27.707: ppp2 LCP: EndpointDisc 1 Local
*Mar 5 02:16:27.707: ppp2 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6)
*Mar 5 02:16:27.707: ppp2 LCP: (0x897EAE00000002)
*Mar 5 02:16:27.707: ppp2 LCP: O CONFACK [ACKrcvd] id 2 len 37
*Mar 5 02:16:27.707: ppp2 LCP: MagicNumber 0x131A2427 (0x0506131A2427)
*Mar 5 02:16:27.707: ppp2 LCP: PFC (0x0702)
*Mar 5 02:16:27.707: ppp2 LCP: ACFC (0x0802)
*Mar 5 02:16:27.711: ppp2 LCP: EndpointDisc 1 Local
                                  (0x131701E18F20C4D84A435B98EBA4BEA6)
*Mar 5 02:16:27.711: ppp2 LCP:
*Mar
     5 02:16:27.711: ppp2 LCP:
                                   (0x897EAE0000002)
     5 02:16:27.711: ppp2 LCP: State is Open
*Mar
*Mar 5 02:16:27.711: ppp2 PPP: Phase is AUTHENTICATING, by this end
*Mar 5 02:16:27.715: ppp2 LCP: I IDENTIFY [Open] id 3 len 18 magic
                                0x131A2427 MSRASV5.00
*Mar 5 02:16:27.719: ppp2 LCP: I IDENTIFY [Open] id 4 len 28 magic
                                0x131A2427 MSRAS-1-USHAFIQ-W2K1
*Mar 5 02:16:27.719: ppp2 PAP: I AUTH-REQ id 1 len 19 from "cisco"
     5 02:16:27.719: ppp2 PAP: Authenticating peer cisco
*Mar
*Mar 5 02:16:27.719: ppp2 PPP: Phase is FORWARDING, Attempting Forward
*Mar 5 02:16:27.719: ppp2 PPP: Phase is AUTHENTICATING, Unauthenticated User
*Mar 5 02:16:27.719: ppp2 PPP: Sent PAP LOGIN Request
*Mar 5 02:16:27.723: ppp2 PPP: Received LOGIN Response PASS
*Mar 5 02:16:27.723: ppp2 PPP: Phase is FORWARDING, Attempting Forward
     5 02:16:27.727: Vi4 PPP: Phase is DOWN, Setup
*Mar
*Mar 5 02:16:27.727:
                       Tnl/Sn3/3 PPTP: Virtual interface created for
                       bandwidth 100000 Kbps
*Mar 5 02:16:27.731: Vi4 Tnl/Sn3/3 PPTP: VPDN session up
*Mar 5 02:16:27.735: %LINK-3-UPDOWN: Interface Virtual-Access4, changed state to up
*Mar 5 02:16:27.735: Vi4 PPP: Phase is AUTHENTICATING, Authenticated User
*Mar 5 02:16:27.735: Vi4 PAP: O AUTH-ACK id 1 len 5
*Mar 5 02:16:27.739: Vi4 PPP: Phase is UP
*Mar
     5 02:16:27.739: Vi4 IPCP: O CONFREQ [Closed] id 1 len 10
*Mar 5 02:16:27.739: Vi4 IPCP:
                                  Address 172.16.142.191 (0x0306AC108EBF)
```

\*Mar 5 02:16:27.739: Vi4 CCP: O CONFREQ [Closed] id 1 len 4 \*Mar 5 02:16:27.739: Vi4 PPP: Process pending packets \*Mar 5 02:16:27.747: Vi4 CCP: I CONFREQ [REQsent] id 5 len 10 \*Mar 5 02:16:27.747: Vi4 CCP: MS-PPC supported bits 0x01000001 (0x120601000001) \*Mar 5 02:16:27.747: Vi4 CCP: O CONFNAK [REQsent] id 5 len 10 \*Mar 5 02:16:27.751: Vi4 CCP: MS-PPC supported bits 0x01000060 (0x120601000060) \*Mar 5 02:16:27.751: Vi4 CCP: I CONFACK [REQsent] id 1 len 4 5 02:16:27.751: Vi4 IPCP: I CONFREQ [REQsent] id 6 len 34 \*Mar Address 0.0.0.0 (0x03060000000) \*Mar 5 02:16:27.751: Vi4 IPCP: \*Mar 5 02:16:27.751: Vi4 IPCP: PrimaryDNS 0.0.0.0 (0x81060000000) \*Mar 5 02:16:27.751: Vi4 IPCP: PrimaryWINS 0.0.0.0 (0x82060000000) \*Mar 5 02:16:27.755: Vi4 IPCP: SecondaryDNS 0.0.0.0 (0x83060000000) \*Mar 5 02:16:27.755: Vi4 IPCP: SecondaryWINS 0.0.0.0 (0x84060000000) \*Mar 5 02:16:27.755: Vi4 AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 0.0.0.0 \*Mar 5 02:16:27.755: Vi4 AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0, we want 0.0.0.0 \*Mar 5 02:16:27.755: Vi4 IPCP: Pool returned 192.168.1.4 \*Mar 5 02:16:27.755: Vi4 IPCP: O CONFREJ [REQsent] id 6 len 28 \*Mar 5 02:16:27.759: Vi4 IPCP: PrimaryDNS 0.0.0.0 (0x81060000000) \*Mar 5 02:16:27.759: Vi4 IPCP: PrimaryWINS 0.0.0.0 (0x82060000000) \*Mar 5 02:16:27.759: Vi4 IPCP: SecondaryDNS 0.0.0.0 (0x83060000000) \*Mar 5 02:16:27.759: Vi4 IPCP: SecondaryWINS 0.0.0.0 (0x84060000000) 5 02:16:27.759: Vi4 IPCP: I CONFACK [REQsent] id 1 len 10 \*Mar \*Mar 5 02:16:27.759: Vi4 IPCP: Address 172.16.142.191 (0x0306AC108EBF) \*Mar 5 02:16:27.763: Vi4 CCP: I CONFREQ [ACKrcvd] id 7 len 4 \*Mar 5 02:16:27.767: Vi4 CCP: O CONFACK [ACKrcvd] id 7 len 4 \*Mar 5 02:16:27.767: Vi4 CCP: State is Open \*Mar 5 02:16:27.767: Vi4 CCP: Compression not negotiated \*Mar 5 02:16:27.767: Vi4 CCP: Decompression not negotiated \*Mar 5 02:16:27.767: Vi4 CCP: Negotiation mismatch, closing CCP \*Mar 5 02:16:27.767: Vi4 CCP: O TERMREQ [Open] id 2 len 4 \*Mar 5 02:16:27.767: Vi4 IPCP: I CONFREQ [ACKrcvd] id 8 len 10 \*Mar 5 02:16:27.767: Vi4 IPCP: Address 0.0.0.0 (0x03060000000) \*Mar 5 02:16:27.771: Vi4 IPCP: O CONFNAK [ACKrcvd] id 8 len 10 \*Mar 5 02:16:27.771: Vi4 IPCP: Address 192.168.1.4 (0x0306C0A80104) \*Mar 5 02:16:27.775: Vi4 CCP: I TERMACK [TERMsent] id 2 len 4 \*Mar 5 02:16:27.775: Vi4 CCP: State is Closed 5 02:16:27.775: Vi4 IPCP: I CONFREQ [ACKrcvd] id 9 len 10 \*Mar \*Mar 5 02:16:27.775: Vi4 IPCP: Address 192.168.1.4 (0x0306C0A80104) \*Mar 5 02:16:27.775: Vi4 IPCP: O CONFACK [ACKrcvd] id 9 len 10 \*Mar 5 02:16:27.779: Vi4 IPCP: Address 192.168.1.4 (0x0306C0A80104) \*Mar 5 02:16:27.779: Vi4 IPCP: State is Open \*Mar 5 02:16:27.783: Vi4 IPCP: Install route to 192.168.1.4 \*Mar 5 02:16:27.783: Vi4 IPCP: Add link info for cef entry 192.168.1.4 \*Mar 5 02:16:28.735: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access4, changed state to up 5 02:16:37.743: Vi4 CCP: O CONFREQ [Closed] id 3 len 4 \*Mar 2621# 2621#

Dies ist die Debug-Ausgabe mit der erforderlichen MPPE- und MS-CHAP-Konfiguration.

2621# \*Mar 5 02:25:01.815: ppp4 PPP: Using vpn set call direction 5 02:25:01.815: ppp4 PPP: Treating connection as a callin \*Mar \*Mar 5 02:25:01.815: ppp4 PPP: Phase is ESTABLISHING, Passive Open \*Mar 5 02:25:01.815: ppp4 LCP: State is Listen \*Mar 5 02:25:03.823: ppp4 LCP: TIMEout: State Listen \*Mar 5 02:25:03.823: ppp4 PPP: Authorization required \*Mar 5 02:25:03.823: ppp4 LCP: O CONFREQ [Listen] id 1 len 15 \*Mar 5 02:25:03.823: ppp4 LCP: AuthProto MS-CHAP (0x0305C22380) 5 02:25:03.823: ppp4 LCP: MagicNumber 0x1660AFA4 (0x05061660AFA4) \*Mar 5 02:25:03.843: ppp4 LCP: I CONFACK [REQsent] id 1 len 15 \*Mar \*Mar 5 02:25:03.843: ppp4 LCP: AuthProto MS-CHAP (0x0305C22380)

\*Mar 5 02:25:03.843: ppp4 LCP: MagicNumber 0x1660AFA4 (0x05061660AFA4) \*Mar 5 02:25:03.843: ppp4 LCP: I CONFREQ [ACKrcvd] id 1 len 44 \*Mar 5 02:25:03.843: ppp4 LCP: MagicNumber 0x4B5A2A81 (0x05064B5A2A81) \*Mar 5 02:25:03.843: ppp4 LCP: PFC (0x0702) \*Mar 5 02:25:03.847: ppp4 LCP: ACFC (0x0802) \*Mar 5 02:25:03.847: ppp4 LCP: Callback 6 (0x0D0306) 
 \*Mar
 5
 02:25:03.847: ppp4 LCP:
 MRRU 1614 (0x1104064E)

 \*Mar
 5
 02:25:03.847: ppp4 LCP:
 EndpointDisc 1 Local
 \*Mar 5 02:25:03.847: ppp4 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:25:03.847: ppp4 LCP: (0x897EAE00000004) \*Mar 5 02:25:03.847: ppp4 LCP: O CONFREJ [ACKrcvd] id 1 len 11 \*Mar 5 02:25:03.847: ppp4 LCP: Callback 6 (0x0D0306) \*Mar 5 02:25:03.851: ppp4 LCP: MRRU 1614 (0x1104064E) \*Mar 5 02:25:03.851: ppp4 LCP: I CONFREQ [ACKrcvd] id 2 len 37 \*Mar 5 02:25:03.855: ppp4 LCP: MagicNumber 0x4B5A2A81 (0x05064B5A2A81) \*Mar 5 02:25:03.855: ppp4 LCP: PFC (0x0702) \*Mar 5 02:25:03.855: ppp4 LCP: ACFC (0x0802) \*Mar 5 02:25:03.855: ppp4 LCP: EndpointDisc 1 Local \*Mar 5 02:25:03.855: ppp4 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:25:03.855: ppp4 LCP: (0x897EAE00000004) \*Mar 5 02:25:03.855: ppp4 LCP: O CONFACK [ACKrcvd] id 2 len 37 \*Mar 5 02:25:03.859: ppp4 LCP: MagicNumber 0x4B5A2A81 (0x05064B5A2A81) \*Mar 5 02:25:03.859: ppp4 LCP: PFC (0x0702) \*Mar 5 02:25:03.859: ppp4 LCP: ACFC (0x0802) \*Mar 5 02:25:03.859: ppp4 LCP: EndpointDisc 1 Local \*Mar 5 02:25:03.859: ppp4 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:25:03.859: ppp4 LCP: (0x897EAE00000004) \*Mar 5 02:25:03.859: ppp4 LCP: State is Open \*Mar 5 02:25:03.859: ppp4 PPP: Phase is AUTHENTICATING, by this end \*Mar 5 02:25:03.863: ppp4 MS-CHAP: O CHALLENGE id 1 len 21 from "2621 \*Mar 5 02:25:03.867: ppp4 LCP: I IDENTIFY [Open] id 3 len 18 magic 0x4B5A2A81 MSRASV5.00 \*Mar 5 02:25:03.867: ppp4 LCP: I IDENTIFY [Open] id 4 len 28 magic 0x4B5A2A81 MSRAS-1-USHAFIQ-W2K1 \*Mar 5 02:25:03.867: ppp4 MS-CHAP: I RESPONSE id 1 len 59 from "cisco" \*Mar 5 02:25:03.867: ppp4 PPP: Phase is FORWARDING, Attempting Forward 5 02:25:03.871: ppp4 PPP: Phase is AUTHENTICATING, Unauthenticated User \*Mar \*Mar 5 02:25:03.871: ppp4 PPP: Sent MSCHAP LOGIN Request \*Mar 5 02:25:03.963: ppp4 PPP: Received LOGIN Response PASS \*Mar 5 02:25:03.963: ppp4 PPP: Phase is FORWARDING, Attempting Forward \*Mar 5 02:25:03.975: Vi4 PPP: Phase is DOWN, Setup \*Mar 5 02:25:03.975: Tnl/Sn5/5 PPTP: Virtual interface created for bandwidth 100000 Kbps \*Mar 5 02:25:03.979: Vi4 Tnl/Sn5/5 PPTP: VPDN session up \*Mar 5 02:25:03.983: %LINK-3-UPDOWN: Interface Virtual-Access4, changed state to up \*Mar 5 02:25:03.983: Vi4 PPP: Phase is AUTHENTICATING, Authenticated User \*Mar 5 02:25:03.983: Vi4 MS-CHAP: O SUCCESS id 1 len 4 \*Mar 5 02:25:03.987: Vi4 PPP: Phase is UP \*Mar 5 02:25:03.987: Vi4 IPCP: O CONFREQ [Closed] id 1 len 10 \*Mar 5 02:25:03.987: Vi4 IPCP: Address 172.16.142.191 (0x0306AC108EBF) \*Mar 5 02:25:03.987: Vi4 CCP: O CONFREQ [Closed] id 1 len 10 \*Mar 5 02:25:03.987: Vi4 CCP: MS-PPC supported bits 0x01000060 (0x120601000060) \*Mar 5 02:25:03.987: Vi4 PPP: Process pending packets \*Mar 5 02:25:03.995: Vi4 CCP: I CONFREQ [REQsent] id 5 len 10 \*Mar 5 02:25:03.995: Vi4 CCP: MS-PPC supported bits 0x01000001 (0x120601000001) \*Mar 5 02:25:03.999: Vi4 CCP: O CONFNAK [REQsent] id 5 len 10 \*Mar 5 02:25:03.999: Vi4 CCP: MS-PPC supported bits 0x01000060 (0x120601000060) 5 02:25:03.999: Vi4 CCP: I CONFNAK [REQsent] id 1 len 10 \*Mar \*Mar 5 02:25:03.999: Vi4 CCP: MS-PPC supported bits 0x01000040 (0x120601000040) \*Mar 5 02:25:03.999: Vi4 CCP: O CONFREQ [REQsent] id 2 len 10 \*Mar 5 02:25:03.999: Vi4 CCP: MS-PPC supported bits 0x01000040 (0x120601000040) \*Mar 5 02:25:04.003: Vi4 IPCP: I CONFREQ [REQsent] id 6 len 34 \*Mar 5 02:25:04.003: Vi4 IPCP: Address 0.0.0.0 (0x03060000000) \*Mar 5 02:25:04.003: Vi4 IPCP: PrimaryDNS 0.0.0.0 (0x81060000000)

\*Mar 5 02:25:04.003: Vi4 IPCP: PrimaryWINS 0.0.0.0 (0x82060000000) \*Mar 5 02:25:04.003: Vi4 IPCP: SecondaryDNS 0.0.0.0 (0x83060000000) \*Mar 5 02:25:04.003: Vi4 IPCP: SecondaryWINS 0.0.0.0 (0x84060000000) \*Mar 5 02:25:04.003: Vi4 AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 0.0.0.0 \*Mar 5 02:25:04.007: Vi4 AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0, we want 0.0.0.0 \*Mar 5 02:25:04.007: Vi4 IPCP: Pool returned 192.168.1.4 \*Mar 5 02:25:04.007: Vi4 IPCP: O CONFREJ [REQsent] id 6 len 28 \*Mar 5 02:25:04.007: Vi4 IPCP: PrimaryDNS 0.0.0.0 (0x81060000000) \*Mar 5 02:25:04.007: Vi4 IPCP: PrimaryWINS 0.0.0.0 (0x82060000000) \*Mar 5 02:25:04.007: Vi4 IPCP: SecondaryDNS 0.0.0.0 (0x83060000000) \*Mar 5 02:25:04.011: Vi4 IPCP: SecondaryWINS 0.0.0.0 (0x84060000000) \*Mar 5 02:25:04.011: Vi4 IPCP: I CONFACK [REQsent] id 1 len 10 \*Mar 5 02:25:04.011: Vi4 IPCP: Address 172.16.142.191 (0x0306AC108EBF) \*Mar 5 02:25:04.015: Vi4 CCP: I CONFREQ [REQsent] id 7 len 10 \*Mar 5 02:25:04.015: Vi4 CCP: MS-PPC supported bits 0x01000040 (0x120601000040) \*Mar 5 02:25:04.015: Vi4 CCP: O CONFACK [REQsent] id 7 len 10 \*Mar 5 02:25:04.015: Vi4 CCP: MS-PPC supported bits 0x01000040 (0x120601000040) \*Mar 5 02:25:04.019: Vi4 CCP: I CONFACK [ACKsent] id 2 len 10 \*Mar 5 02:25:04.019: Vi4 CCP: MS-PPC supported bits 0x01000040 (0x120601000040) \*Mar 5 02:25:04.019: Vi4 CCP: State is Open \*Mar 5 02:25:04.023: Vi4 IPCP: I CONFREQ [ACKrcvd] id 8 len 10 \*Mar 5 02:25:04.027: Vi4 IPCP: Address 0.0.0.0 (0x03060000000) \*Mar 5 02:25:04.027: Vi4 IPCP: O CONFNAK [ACKrcvd] id 8 len 10 \*Mar 5 02:25:04.027: Vi4 IPCP: Address 192.168.1.4 (0x0306C0A80104) \*Mar 5 02:25:04.031: Vi4 IPCP: I CONFREQ [ACKrcvd] id 9 len 10 \*Mar 5 02:25:04.031: Vi4 IPCP: Address 192.168.1.4 (0x0306C0A80104) \*Mar 5 02:25:04.031: Vi4 IPCP: O CONFACK [ACKrcvd] id 9 len 10 \*Mar 5 02:25:04.031: Vi4 IPCP: Address 192.168.1.4 (0x0306C0A80104) \*Mar 5 02:25:04.031: Vi4 IPCP: State is Open \*Mar 5 02:25:04.035: Vi4 IPCP: Install route to 192.168.1.4 \*Mar 5 02:25:04.035: Vi4 IPCP: Add link info for cef entry 192.168.1.4 \*Mar 5 02:25:04.983: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access4, changed state to up

Diese Anzeige der Benutzerausgabe erfolgt vor der Aktivierung von MS-CHAP und MPPE.

26	521# <b>show user</b>										
	Line	User	Host(s)		Idle	Location					
*	0 con 0		idle		00:00:00						
	Interface	User		Mode	Idle	Peer Address					
	Vi4	cisco		PPPoVPDN	00:00:01	192.168.1.4					
Diese Anzeige der Benutzerausgabe erfolgt nach Aktivierung von MS-CHAP und MPPE.											

2	621# <b>show user</b>					
	Line	User	Host(s)		Idle	Location
*	0 con 0		idle		00:00:00	
	Interface	User		Mode	Idle	Peer Address
	Vi4	cisco		PPPoVPDN	00:00:00	192.168.1.4
_						

Diese **show ip route connected** output ist vor der Aktivierung von MS-CHAP und MPPE.

#### 2621#show ip route connected 172.16.0.0/24 is subnetted, 1 subnets C 172.16.142.0 is directly connected, FastEthernet0/0 10.0.0.0/24 is subnetted, 1 subnets C 10.100.100.0 is directly connected, Loopback0 192.168.1.0/32 is subnetted, 1 subnets C 192.168.1.4 is directly connected, Virtual-Access4

#### Diese show vpdn-Ausgabe erfolgt vor der Aktivierung von MS-CHAP und MPPE.

2621#**show vpdn** %No active L2TP tunnels %No active L2F tunnels PPTP Tunnel and Session Information Total tunnels 1 sessions 1 LocID Remote Name State Remote Address Port Sessions VPDN Group 3 estabd 171.69.89.81 4737 1 1 LocID RemID TunID Intf Username State Last Chg Uniq ID 3 32768 3 Vi4 cisco estabd 00:01:44 2

%No active PPPoE tunnels

Diese show vpdn-Ausgabe erfolgt nach Aktivierung von MS-CHAP und MPPE.

2621#show vpdn
%No active L2TP tunnels
%No active L2F tunnels
PPTP Tunnel and Session Information Total tunnels 1 sessions 1
LocID Remote Name State Remote Address Port Sessions VPDN Group
5 estabd 171.69.89.81 4893 1 1
LocID RemID TunID Intf Username State Last Chg Uniq ID
5 0 5 Vi4 cisco estabd 00:00:37 4

%No active PPPoE tunnels

#### **Fehlerbehebung**

Dieser Abschnitt enthält Informationen zur Fehlerbehebung in Ihrer Konfiguration.

#### Befehle zur Fehlerbehebung

Bestimmte **show**-Befehle werden vom <u>Output Interpreter Tool</u> unterstützt (nur <u>registrierte</u> Kunden), mit dem Sie eine Analyse der **show**-Befehlsausgabe anzeigen können.

**Hinweis:** Beachten Sie <u>vor der</u> Verwendung von **Debug-**Befehlen die <u>Informationen</u> zu <u>Debug-</u><u>Befehlen</u>.

 clear vpdn tunnel pptp - Wird zum Herunterfahren eines angegebenen Tunnels und aller Sitzungen im Tunnel verwendet und löscht den angegebenen PPTP-Tunnel.

2621#clear vpdn tunnel pptp ip remote 171.69.89.81 Starting to clear the tunnel

\*Mar 5 02:27:35.611: Vi4 VPDN: Reseting interface \*Mar 5 02:27:35.611: Vi4 PPP: Block vaccess from being freed [0x1D] \*Mar 5 02:27:35.619: %LINK-3-UPDOWN: Interface Virtual-Access4, changed state to down \*Mar 5 02:27:35.619: Vi4 CCP: State is Closed \*Mar 5 02:27:35.623: Vi4 MPPE: Required encryption not negotiated \*Mar 5 02:27:35.623: Vi4 IPCP: Remove link info for cef entry 192.168.1.4 \*Mar 5 02:27:35.623: Vi4 PPP: Unlocked by [0x4] Still Locked by [0x1B] 5 02:27:35.623: Vi4 PPP: Unlocked by [0x10] Still Locked by [0xB] \*Mar \*Mar 5 02:27:35.623: Vi4 PPP: Phase is TERMINATING \*Mar 5 02:27:35.627: Vi4 LCP: O TERMREQ [Open] id 2 len 4 \*Mar 5 02:27:35.627: Vi4 IPCP: State is Closed \*Mar 5 02:27:35.627: Vi4 PPP: Unlocked by [0x8] Still Locked by [0x3] \*Mar 5 02:27:35.627: Vi4 LCP: State is Closed \*Mar 5 02:27:35.627: Vi4 PPP: Phase is DOWN \*Mar 5 02:27:35.627: Vi4 PPP: Unlocked by [0x2] Still Locked by [0x1] \*Mar 5 02:27:35.639: Vi4 IPCP: Remove route to 192.168.1.4 \*Mar 5 02:27:35.639: Vi4 PPP: Unlocked by [0x1] Still Locked by [0x0] \*Mar 5 02:27:35.639: Vi4 PPP: Free previously blocked vaccess \*Mar 5 02:27:36.619: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access4, changed state to down

Entschlüsselungsfehler - Debug-Ausgabe des Routers, der für eine 128 starke Verschlüsselung konfiguriert ist, wenn der VPN-Client für eine 40-Bit-Verschlüsselung konfiguriert ist.

2621# 2621# \*Mar 5 02:29:36.339: ppp5 PPP: Using vpn set call direction \*Mar 5 02:29:36.339: ppp5 PPP: Treating connection as a callin \*Mar 5 02:29:36.339: ppp5 PPP: Phase is ESTABLISHING, Passive Open \*Mar 5 02:29:36.343: ppp5 LCP: State is Listen \*Mar 5 02:29:38.351: ppp5 LCP: TIMEout: State Listen \*Mar 5 02:29:38.351: ppp5 PPP: Authorization required \*Mar 5 02:29:38.351: ppp5 LCP: O CONFREQ [Listen] id 1 len 15 \*Mar 5 02:29:38.351: ppp5 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:29:38.351: ppp5 LCP: MagicNumber 0x1664E006 (0x05061664E006) \*Mar 5 02:29:38.359: ppp5 LCP: I CONFACK [REQsent] id 1 len 15 

 5 02:29:38.359: ppp5 LCP:
 AuthProto MS-CHAP (0x0305C22380)

 5 02:29:38.359: ppp5 LCP:
 MagicNumber 0x1664E006 (0x05061664E006)

 \*Mar \*Mar 5 02:29:38.359: ppp5 LCP: \*Mar 5 02:29:38.359: ppp5 LCP: I CONFREQ [ACKrcvd] id 1 len 44 \*Mar 5 02:29:38.359: ppp5 LCP: MagicNumber 0x793D5ED8 (0x0506793D5ED8) \*Mar 5 02:29:38.363: ppp5 LCP: PFC (0x0702) \*Mar 5 02:29:38.363: ppp5 LCP: ACFC (0x0802) \*Mar 5 02:29:38.363: ppp5 LCP: Callback 6 (0x0D0306) \*Mar 5 02:29:38.363: ppp5 LCP: MRRU 1614 (0x1104064E) \*Mar 5 02:29:38.363: ppp5 LCP: EndpointDisc 1 Local \*Mar 5 02:29:38.363: ppp5 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:29:38.363: ppp5 LCP: (0x897EAE00000005) \*Mar 5 02:29:38.363: ppp5 LCP: O CONFREJ [ACKrcvd] id 1 len 11 \*Mar 5 02:29:38.367: ppp5 LCP: Callback 6 (0x0D0306) \*Mar 5 02:29:38.367: ppp5 LCP: MRRU 1614 (0x1104064E) \*Mar 5 02:29:38.367: ppp5 LCP: I CONFREQ [ACKrcvd] id 2 len 37 \*Mar 5 02:29:38.371: ppp5 LCP: MagicNumber 0x793D5ED8 (0x0506793D5ED8) \*Mar 5 02:29:38.371: ppp5 LCP: PFC (0x0702) \*Mar 5 02:29:38.371: ppp5 LCP: ACFC (0x0802) \*Mar 5 02:29:38.371: ppp5 LCP: EndpointDisc 1 Local \*Mar 5 02:29:38.371: ppp5 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:29:38.371: ppp5 LCP: (0x897EAE00000005) \*Mar 5 02:29:38.371: ppp5 LCP: O CONFACK [ACKrcvd] id 2 len 37 5 02:29:38.375: ppp5 LCP: MagicNumber 0x793D5ED8 (0x0506793D5ED8) \*Mar \*Mar 5 02:29:38.375: ppp5 LCP: PFC (0x0702) \*Mar 5 02:29:38.375: ppp5 LCP: ACFC (0x0802) \*Mar 5 02:29:38.375: ppp5 LCP: EndpointDisc 1 Local \*Mar 5 02:29:38.375: ppp5 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6)

\*Mar 5 02:29:38.375: ppp5 LCP: (0x897EAE00000005) \*Mar 5 02:29:38.375: ppp5 LCP: State is Open \*Mar 5 02:29:38.375: ppp5 PPP: Phase is AUTHENTICATING, by this end \*Mar 5 02:29:38.379: ppp5 MS-CHAP: O CHALLENGE id 1 len 21 from "2621 \*Mar 5 02:29:38.383: ppp5 LCP: I IDENTIFY [Open] id 3 len 18 magic 0x793D5ED8 MSRASV5.00 \*Mar 5 02:29:38.383: ppp5 LCP: I IDENTIFY [Open] id 4 len 28 magic 0x793D5ED8 MSRAS-1-USHAFIQ-W2K1 \*Mar 5 02:29:38.383: ppp5 MS-CHAP: I RESPONSE id 1 len 59 from "cisco" \*Mar 5 02:29:38.383: ppp5 PPP: Phase is FORWARDING, Attempting Forward \*Mar 5 02:29:38.387: ppp5 PPP: Phase is AUTHENTICATING, Unauthenticated User \*Mar 5 02:29:38.387: ppp5 PPP: Sent MSCHAP LOGIN Request \*Mar 5 02:29:38.475: ppp5 PPP: Received LOGIN Response PASS \*Mar 5 02:29:38.479: ppp5 PPP: Phase is FORWARDING, Attempting Forward \*Mar 5 02:29:38.483: Vi4 PPP: Phase is DOWN, Setup \*Mar 5 02:29:38.483: Tnl/Sn6/6 PPTP: Virtual interface created for bandwidth 100000 Kbps \*Mar 5 02:29:38.483: Vi4 Tnl/Sn6/6 PPTP: VPDN session up \*Mar 5 02:29:38.487: %LINK-3-UPDOWN: Interface Virtual-Access4, changed state to up \*Mar 5 02:29:38.487: Vi4 PPP: Phase is AUTHENTICATING, Authenticated User \*Mar 5 02:29:38.487: Vi4 MS-CHAP: O SUCCESS id 1 len 4 5 02:29:38.491: Vi4 PPP: Phase is UP \*Mar \*Mar 5 02:29:38.491: Vi4 IPCP: O CONFREQ [Closed] id 1 len 10 \*Mar 5 02:29:38.491: Vi4 IPCP: Address 172.16.142.191 (0x0306AC108EBF) \*Mar 5 02:29:38.491: Vi4 CCP: O CONFREQ [Closed] id 1 len 10 \*Mar 5 02:29:38.491: Vi4 CCP: MS-PPC supported bits 0x01000060 (0x120601000060) \*Mar 5 02:29:38.491: Vi4 PPP: Process pending packets \*Mar 5 02:29:38.499: Vi4 CCP: I CONFREQ [REQsent] id 5 len 10 \*Mar 5 02:29:38.503: Vi4 CCP: MS-PPC supported bits 0x01000001 (0x120601000001) \*Mar 5 02:29:38.503: Vi4 CCP: O CONFNAK [REQsent] id 5 len 10 \*Mar 5 02:29:38.503: Vi4 CCP: MS-PPC supported bits 0x01000060 (0x120601000060) \*Mar 5 02:29:38.503: Vi4 CCP: I CONFREJ [REQsent] id 1 len 10 \*Mar 5 02:29:38.503: Vi4 CCP: MS-PPC supported bits 0x01000060 (0x120601000060) \*Mar 5 02:29:38.503: Vi4 MPPE: Required encryption not negotiated \*Mar 5 02:29:38.503: Vi4 PPP: Sending Acct Event[Down] id[6] \*Mar 5 02:29:38.507: Vi4 CCP: State is Closed 5 02:29:38.507: Vi4 MPPE: Required encryption not negotiated \*Mar \*Mar 5 02:29:38.507: Vi4 PPP: Phase is TERMINATING \*Mar 5 02:29:38.507: Vi4 LCP: O TERMREQ [Open] id 2 len 4 \*Mar 5 02:29:38.507: Vi4 IPCP: State is Closed \*Mar 5 02:29:38.507: Vi4 LCP: State is Closed \*Mar 5 02:29:38.511: Vi4 PPP: Phase is DOWN \*Mar 5 02:29:38.511: Vi4 VPDN: Reseting interface 5 02:29:38.515: Vi4 PPP: Phase is ESTABLISHING, Passive Open \*Mar \*Mar 5 02:29:38.515: Vi4 LCP: State is Listen \*Mar 5 02:29:38.515: Vi4 CCP: O CONFREQ [Closed] id 2 len 4 \*Mar 5 02:29:38.519: %LINK-3-UPDOWN: Interface Virtual-Access4, changed state to down \*Mar 5 02:29:38.519: Vi4 LCP: State is Closed \*Mar 5 02:29:38.519: Vi4 PPP: Phase is DOWN

Authentication Mismatch (Nicht übereinstimmende Authentifizierung) - Debug-Ausgabe des für MS-CHAP konfigurierten Routers und des für PAP konfigurierten VPN-Clients.

```
*Mar 5 02:30:46.555: ppp6 PPP: Using vpn set call direction
*Mar 5 02:30:46.559: ppp6 PPP: Treating connection as a callin
*Mar 5 02:30:46.559: ppp6 PPP: Phase is ESTABLISHING, Passive Open
*Mar 5 02:30:46.559: ppp6 LCP: State is Listen
*Mar 5 02:30:48.559: ppp6 LCP: TIMEout: State Listen
*Mar 5 02:30:48.559: ppp6 LCP: O CONFREQ [Listen] id 1 len 15
*Mar 5 02:30:48.559: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380)
*Mar 5 02:30:48.559: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247)
*Mar 5 02:30:48.575: ppp6 LCP: I CONFNAK [REQsent] id 1 len 8
```

\*Mar 5 02:30:48.575: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar 5 02:30:48.575: ppp6 LCP: O CONFREQ [REQsent] id 2 len 15 \*Mar 5 02:30:48.575: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.575: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.579: ppp6 LCP: I CONFREQ [REQsent] id 1 len 44 \*Mar 5 02:30:48.579: ppp6 LCP: MagicNumber 0x78FD271D (0x050678FD271D) \*Mar 5 02:30:48.579: ppp6 LCP: PFC (0x0702) \*Mar 5 02:30:48.579: ppp6 LCP: ACFC (0x0802) \*Mar 5 02:30:48.579: ppp6 LCP: Callback 6 (0x0D0306) \*Mar 5 02:30:48.579: ppp6 LCP: MRRU 1614 (0x1104064E) \*Mar 5 02:30:48.579: ppp6 LCP: EndpointDisc 1 Local \*Mar 5 02:30:48.583: ppp6 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:30:48.583: ppp6 LCP: (0x897EAE00000006) \*Mar 5 02:30:48.583: ppp6 LCP: O CONFREJ [REQsent] id 1 len 11 \*Mar 5 02:30:48.583: ppp6 LCP: Callback 6 (0x0D0306) \*Mar 5 02:30:48.583: ppp6 LCP: MRRU 1614 (0x1104064E) \*Mar 5 02:30:48.587: ppp6 LCP: I CONFNAK [REQsent] id 2 len 8 \*Mar 5 02:30:48.587: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar 5 02:30:48.587: ppp6 LCP: O CONFREQ [REQsent] id 3 len 15 \*Mar 5 02:30:48.587: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.587: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.591: ppp6 LCP: I CONFREQ [REQsent] id 2 len 37 \*Mar 5 02:30:48.591: ppp6 LCP: MagicNumber 0x78FD271D (0x050678FD271D) \*Mar 5 02:30:48.591: ppp6 LCP: PFC (0x0702) \*Mar 5 02:30:48.591: ppp6 LCP: ACFC (0x0802) \*Mar 5 02:30:48.591: ppp6 LCP: EndpointDisc 1 Local \*Mar 5 02:30:48.591: ppp6 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:30:48.595: ppp6 LCP: (0x897EAE00000006) \*Mar 5 02:30:48.595: ppp6 LCP: O CONFACK [REQsent] id 2 len 37 \*Mar 5 02:30:48.595: ppp6 LCP: MagicNumber 0x78FD271D (0x050678FD271D) \*Mar 5 02:30:48.595: ppp6 LCP: PFC (0x0702) \*Mar 5 02:30:48.595: ppp6 LCP: ACFC (0x0802) \*Mar 5 02:30:48.595: ppp6 LCP: EndpointDisc 1 Local \*Mar 5 02:30:48.595: ppp6 LCP: (0x131701E18F20C4D84A435B98EBA4BEA6) \*Mar 5 02:30:48.595: ppp6 LCP: (0x897EAE00000006) \*Mar 5 02:30:48.599: ppp6 LCP: I CONFNAK [ACKsent] id 3 len 8 5 02:30:48.599: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar \*Mar 5 02:30:48.599: ppp6 LCP: O CONFREQ [ACKsent] id 4 len 15 \*Mar 5 02:30:48.599: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.599: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.603: ppp6 LCP: I CONFNAK [ACKsent] id 4 len 8 \*Mar 5 02:30:48.603: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar 5 02:30:48.607: ppp6 LCP: O CONFREQ [ACKsent] id 5 len 15 \*Mar 5 02:30:48.607: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.607: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.611: ppp6 LCP: I CONFNAK [ACKsent] id 5 len 8 \*Mar 5 02:30:48.611: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar 5 02:30:48.611: ppp6 LCP: O CONFREQ [ACKsent] id 6 len 15 \*Mar 5 02:30:48.611: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.611: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.615: ppp6 LCP: I CONFNAK [ACKsent] id 6 len 8 \*Mar 5 02:30:48.615: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar 5 02:30:48.615: ppp6 LCP: O CONFREQ [ACKsent] id 7 len 15 \*Mar 5 02:30:48.615: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.619: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.619: ppp6 LCP: I CONFNAK [ACKsent] id 7 len 8 \*Mar 5 02:30:48.619: ppp6 LCP: AuthProto PAP (0x0304C023) 5 02:30:48.623: ppp6 LCP: O CONFREQ [ACKsent] id 8 len 15 \*Mar \*Mar 5 02:30:48.623: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380) \*Mar 5 02:30:48.623: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247) \*Mar 5 02:30:48.627: ppp6 LCP: I CONFNAK [ACKsent] id 8 len 8 \*Mar 5 02:30:48.627: ppp6 LCP: AuthProto PAP (0x0304C023) \*Mar 5 02:30:48.627: ppp6 LCP: O CONFREQ [ACKsent] id 9 len 15 \*Mar 5 02:30:48.627: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380)

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*Mar 5 02:30:48.627: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247)
*Mar 5 02:30:48.631: ppp6 LCP: I CONFNAK [ACKsent] id 9 len 8
*Mar 5 02:30:48.631: ppp6 LCP: AuthProto PAP (0x0304C023)
*Mar 5 02:30:48.631: ppp6 LCP: O CONFREQ [ACKsent] id 10 len 15
*Mar 5 02:30:48.635: ppp6 LCP: AuthProto MS-CHAP (0x0305C22380)
*Mar 5 02:30:48.635: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247)
*Mar 5 02:30:48.635: ppp6 LCP: MagicNumber 0x1665F247 (0x05061665F247)
*Mar 5 02:30:48.639: ppp6 LCP: I CONFNAK [ACKsent] id 10 len 8
*Mar 5 02:30:48.639: ppp6 LCP: AuthProto PAP (0x0304C023)
*Mar 5 02:30:48.639: ppp6 LCP: Failed to negotiate with peer
*Mar 5 02:30:48.639: ppp6 LCP: O TERMREQ [ACKsent] id 11 len 4
*Mar 5 02:30:48.639: ppp6 LCP: I TERMACK [TERMsent] id 11 len 4
*Mar 5 02:30:48.647: ppp6 LCP: State is Closed
*Mar 5 02:30:48.647: ppp6 PPP: Phase is DOWN
```

#### Zugehörige Informationen

- Konfigurieren der Cisco Secure PIX Firewall zur Verwendung von PPTP
- PPTP-Support-Seite
- <u>Technischer Support und Dokumentation Cisco Systems</u>