



# Cisco IOS Troubleshooting

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Last Updated: December 15, 2011

- [Finding Feature Information, page 1](#)
- [Troubleshooting, page 1](#)

## Finding Feature Information

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the Feature Information Table at the end of this document.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

## Troubleshooting

- [Using Debug Commands, page 1](#)
- [Using Show Commands, page 8](#)
- [debug radius accounting, page 10](#)

## Using Debug Commands

- [debug radius, page 1](#)

### debug radius

The output below is from troubleshooting AAA redirect using called number for an incoming POTS dial peer.

```
!In this example, an incoming call is set up using dial-peer voice 1000 pots  
. Applying voice-class aaa 1
```



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**Americas Headquarters:**  
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```

to dial-peer voice 1000
redirects AAA requests to the server specified for method list sanj_aaal:10.6.20.70 auth-
port 1698 acct-port 1699.
aaa group server radius sgl
server 10.6.20.70 auth-port 1698 acct-port 1699
!
aaa group server radius sg6
server 10.6.20.70 auth-port 1704 acct-port 1705
!
aaa group server radius sg7
server 10.6.20.70 auth-port 1720 acct-port 1721
!
aaa authentication login sanj_aaal group sgl
aaa authorization exec sanj_aaal group sgl
aaa accounting connection sanj_aaal start-stop group sgl
!
aaa authentication login sanj_aaa6 group sg6
aaa authorization exec sanj_aaa6 group sg6
aaa accounting connection sanj_aaa6 start-stop group sg6
!
aaa authentication login sanj_aaa7 group sg7
aaa authorization exec sanj_aaa7 group sg7
aaa accounting connection sanj_aaa7 start-stop group sg7
!
voice class aaa 1
authentication method sanj_aaal
authorization method sanj_aaal
accounting method sanj_aaal
accounting template cdr1
!
voice class aaa 2
authentication method sanj_aaa6
authorization method sanj_aaa6
accounting method sanj_aaa6
accounting template cdr2
!
voice class aaa 3
authentication method sanj_aaa7
authorization method sanj_aaa7
accounting method sanj_aaa7
!
dial-peer voice 1000 pots
application plain_debit
incoming called-number 12345
voice-class aaa 1
port 0:D
!
dial-peer voice 1001 pots
application plain_debit
incoming called-number 12346
voice-class aaa 2
port 1:D
debug radius
Radius protocol debugging is on
Radius packet hex dump debugging is off
Radius packet protocol debugging is on
debug isdn q931
ISDN Q931 packets debugging is on
00:17:55: ISDN Se0:23: RX <- SETUP pd = 8 callref = 0x009D
00:17:55: Bearer Capability i = 0x8090A2
00:17:55: Channel ID i = 0xE1808397
00:17:55: Calling Party Number i = 0x0080, '4081234567', Plan:Unknown,
Type:Unknown
00:17:55: Called Party Number i = 0xE9, '12345', Plan:Private, Type:Abbreviated
00:17:55: RADIUS/ENCODE(0000000C): Unsupported AAA attribute timezone
00:17:55: RADIUS(0000000C): Encoding nas-port...Only port-type av1bl
00:17:55: RADIUS(0000000C): sending
00:17:55: RADIUS: Send to unknown id 4 10.6.20.70:1699, Accounting-Request, len 262
00:17:55: RADIUS: authenticator 10 41 58 99 4C F2 B1 CD - 44 3E E3 60 5D 10 C3 A9
00:17:55: RADIUS: Acct-Session-Id [44] 10 "0000000C"
00:17:55: RADIUS: Vendor, Cisco [26] 56
00:17:55: RADIUS: Conf-Id [24] 50 "h323-conf-id=B8FE8B7F BF1711D3 800CE483
89ADC43B"

```

```

00:17:55: RADIUS: Vendor, Cisco [26] 31
00:17:55: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
00:17:55: RADIUS: Vendor, Cisco [26] 65
00:17:55: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=B8FE8B7F BF1711D3
800CE483 89ADC43B"
00:17:55: RADIUS: User-Name [1] 12 "4081234567"
00:17:55: RADIUS: Acct-Status-Type [40] 6 Start [1]
00:17:55: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:17:55: RADIUS: Vendor, Cisco [26] 19
00:17:55: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
00:17:55: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:17:55: RADIUS: Called-Station-Id [30] 7 "12345"
00:17:55: RADIUS: Service-Type [6] 6 Login [1]
00:17:55: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:17:55: RADIUS: Delay-Time [41] 6 0
00:17:55: ISDN Se0:23: TX -> CALL_PROC pd = 8 callref = 0x809D
00:17:55: Channel ID i = 0xA98397
00:17:55: ISDN Se0:23: TX -> CONNECT pd = 8 callref = 0x809D
00:17:55: RADIUS: Received from id 4 10.6.20.70:1699, Accounting-response, len 20
00:17:55: RADIUS: authenticator DC CD BA E8 7E 02 EA D1 - 12 67 DC 57 3C 73 56 75
00:17:55: ISDN Se0:23: RX <- CONNECT_ACK pd = 8 callref = 0x009D
00:17:55: ISDN Se0:23: CALL_PROGRESS: CALL_CONNECTED call id 0x63, bchan 22, dsl 0
00:17:55: %ISDN-6-CONNECT: Interface Serial0:22 is now connected to 4081234567
00:18:01: %ISDN-6-CONNECT: Interface Serial0:22 is now connected to 4081234567
00:18:06: RADIUS(0000000C): Encoding nas-port...Only port-type avlbl
00:18:06: RADIUS/ENCODE(0000000C): acct_session_id: 12
00:18:06: RADIUS(0000000C): sending
00:18:06: RADIUS: Send to unknown id 3 10.6.20.70:1698, Access-Request, len 199
00:18:06: RADIUS: authenticator 4B 2C 8C D7 12 54 45 3D - 51 44 30 05 C3 9B 44 B1
00:18:06: RADIUS: User-Name [1] 8 "777777"
00:18:06: RADIUS: User-Password [2] 18 *
00:18:06: RADIUS: Vendor, Cisco [26] 56
00:18:06: RADIUS: Conf-Id [24] 50 "h323-conf-id=61A46F2C 00000003 62E66E40
62E3A5C8"
00:18:06: RADIUS: Vendor, Cisco [26] 36
00:18:06: RADIUS: Cisco AVpair [1] 30 "h323-ivr-out=transactionID:3"
00:18:06: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:18:06: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:18:06: RADIUS: Vendor, Cisco [26] 19
00:18:06: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
00:18:06: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:18:06: RADIUS: Service-Type [6] 6 Login [1]
00:18:06: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:18:06: RADIUS: Received from id 3 10.6.20.70:1698, Access-Accept, len 200
00:18:06: RADIUS: authenticator 9C AA 9E 4C 64 02 13 3A - 72 8C 3F D9 72 D0 3B 06
00:18:06: RADIUS: Vendor, Cisco [26] 27
00:18:06: RADIUS: Cisco AVpair [1] 21 "h323-ivr-in=sanjose"
00:18:06: RADIUS: Vendor, Cisco [26] 34
00:18:06: RADIUS: Cisco AVpair [1] 28 "h323-credit-amount=7777.77"
00:18:06: RADIUS: Vendor, Cisco [26] 26
00:18:06: RADIUS: Cisco AVpair [1] 20 "h323-return-code=0"
00:18:06: RADIUS: Vendor, Cisco [26] 30
00:18:06: RADIUS: h323-credit-time [102] 24 "h323-credit-time=54329"
00:18:06: RADIUS: Vendor, Cisco [26] 33
00:18:06: RADIUS: h323-billing-model [109] 27 "h323-billing-model=prepay"
00:18:06: RADIUS: Vendor, Cisco [26] 24
00:18:06: RADIUS: h323-currency [110] 18 "h323-currency=US"
00:18:06: RADIUS: Idle-Timeout [28] 6 30
00:18:06: RADIUS: Received from id C
00:18:27: ISDN Se0:23: RX <- DISCONNECT pd = 8 callref = 0x009D
00:18:27: Cause i = 0x8290 - Normal call clearing
00:18:27: %ISDN-6-DISCONNECT: Interface Serial0:22 disconnected from 4081234567 , call
lasted 32 seconds
00:18:27: ISDN Se0:23: TX -> RELEASE pd = 8 callref = 0x809D
00:18:27: ISDN Se0:23: RX <- RELEASE_COMP pd = 8 callref = 0x009D
00:18:27: RADIUS/ENCODE(0000000C): Unsupported AAA attribute timezone
00:18:27: RADIUS(0000000C): Encoding nas-port...Only port-type avlbl
00:18:27: RADIUS(0000000C): sending
00:18:27: RADIUS: Send to unknown id 5 10.6.20.70:1699, Accounting-Request, len 327
00:18:27: RADIUS: authenticator 2D 65 1C 38 6D 5B B3 DD - C8 57 D6 02 B4 4F E4 4E
00:18:27: RADIUS: Acct-Session-Id [44] 10 "0000000C"
00:18:27: RADIUS: Vendor, Cisco [26] 56
00:18:27: RADIUS: Conf-Id [24] 50 "h323-conf-id=B8FE8B7F BF1711D3 800CE483

```

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89ADC43B"
00:18:27: RADIUS: Vendor, Cisco [26] 31
00:18:27: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
00:18:27: RADIUS: Vendor, Cisco [26] 65
00:18:27: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=B8FE8B7F BF1711D3
800CE483 89ADC43B"
00:18:27: RADIUS: Acct-Input-Octets [42] 6 0
00:18:27: RADIUS: Acct-Output-Octets [43] 6 148000
00:18:27: RADIUS: Acct-Input-Packets [47] 6 0
00:18:27: RADIUS: Acct-Output-Packets [48] 6 925
00:18:27: RADIUS: Acct-Session-Time [46] 6 32
00:18:27: RADIUS: Vendor, Cisco [26] 35
00:18:27: RADIUS: Cisco AVpair [1] 29 "h323-ivr-out=Tariff:Unknown"
00:18:27: RADIUS: User-Name [1] 12 "4081234567"
00:18:27: RADIUS: Acct-Status-Type [40] 6 Stop [2]
00:18:27: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:18:27: RADIUS: Vendor, Cisco [26] 19
00:18:27: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
00:18:27: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:18:27: RADIUS: Called-Station-Id [30] 7 "12345"
00:18:27: RADIUS: Service-Type [6] 6 Login [1]
00:18:27: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:18:27: RADIUS: Delay-Time [41] 6 0
00:18:27: RADIUS: Received from id 5 10.6.20.70:1699, Accounting-response, len 20
00:18:27: RADIUS: authenticator E5 B1 ED 3B AD A8 5B 5C - 49 83 63 BA DF 02 B2 00
An incoming call is set up using dial-peer voice 1001 pots. dial-peer voice 1001 has
voice-class aaa 2 applied which should redirect AAA requests to the server specified for
method list sanj_aaa6: 10.6.20.70 auth-port 1708 acct-port 1709.
00:30:05: ISDN Sel:23: RX <- SETUP pd = 8 callref = 0x0004
00:30:05: Bearer Capability i = 0x8090A2
00:30:05: Channel ID i = 0xE1808397
00:30:05: Calling Party Number i = 0x0080, '4081234567', Plan:Unknown,
Type:Unknown
00:30:05: Called Party Number i = 0xE9, '12346', Plan:Private, Type:Abbreviated
00:30:05: RADIUS/ENCODE(0000000E): Unsupported AAA attribute timezone
00:30:05: RADIUS(0000000E): Encoding nas-port...Only port-type avlbl
00:30:05: RADIUS(0000000E): sending
00:30:05: RADIUS: Send to unknown id 6 10.6.20.70:1709, Accounting-Request, len 262
00:30:05: RADIUS: authenticator 2F 3A 09 3D 6B C4 10 D2 - F6 68 D6 F4 36 35 C3 DE
00:30:05: RADIUS: Acct-Session-Id [44] 10 "0000000E"
00:30:05: RADIUS: Vendor, Cisco [26] 56
00:30:05: RADIUS: Conf-Id [24] 50 "h323-conf-id=6C29BC16 BF1911D3 8010E483
89ADC43B"
00:30:05: RADIUS: Vendor, Cisco [26] 31
00:30:05: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
00:30:05: RADIUS: Vendor, Cisco [26] 65
00:30:05: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=6C29BC16 BF1911D3
8010E483 89ADC43B"
00:30:05: RADIUS: User-Name [1] 12 "4081234567"
00:30:05: RADIUS: Acct-Status-Type [40] 6 Start [1]
00:30:05: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:30:05: RADIUS: Vendor, Cisco [26] 19
00:30:05: RADIUS: cisco-nas-port [2] 13 "ISDN 1:D:23"
00:30:05: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:30:05: RADIUS: Called-Station-Id [30] 7 "12346"
00:30:05: RADIUS: Service-Type [6] 6 Login [1]
00:30:05: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:30:05: RADIUS: Delay-Time [41] 6 0
00:30:05: ISDN Sel:23: TX -> CALL_PROC pd = 8 callref = 0x8004
00:30:05: Channel ID i = 0xA98397
00:30:05: ISDN Sel:23: TX -> CONNECT pd = 8 callref = 0x8004
00:30:05: ISDN Sel:23: RX <- CONNECT_ACK pd = 8 callref = 0x0004
00:30:05: ISDN Sel:23: CALL_PROGRESS: CALL_CONNECTED call id 0x64, bchan 22, dsl 1
00:30:05: %ISDN-6-CONNECT: Interface Serial1:22 is now connected to 4081234567
00:30:06: RADIUS: Received from id 6 10.6.20.70:1709, Accounting-response, len 20
00:30:06: RADIUS: authenticator E1 AD 70 9F DC 09 29 32 - 74 47 96 9F 3F 77 27 82
00:30:11: %ISDN-6-CONNECT: Interface Serial1:22 is now connected to 4081234567
00:30:19: RADIUS(0000000E): Encoding nas-port...Only port-type avlbl
00:30:19: RADIUS/ENCODE(0000000E): acct_session_id: 14
00:30:19: RADIUS(0000000E): sending
00:30:19: RADIUS: Send to unknown id 4 10.6.20.70:1708, Access-Request, len 199
00:30:19: RADIUS: authenticator CE 16 21 8D A5 59 56 9F - B7 E9 CA 5C EC C5 89 A0
00:30:19: RADIUS: User-Name [1] 8 "777777"

```

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00:30:19: RADIUS: User-Password [2] 18 *
00:30:19: RADIUS: Vendor, Cisco [26] 56
00:30:19: RADIUS: Conf-Id [24] 50 "h323-conf-id=61A46F2C 00000003 62E66E40
634A0A64"
00:30:19: RADIUS: Vendor, Cisco [26] 36
00:30:19: RADIUS: Cisco AVpair [1] 30 "h323-ivr-out=transactionID:4"
00:30:19: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:30:19: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:30:19: RADIUS: Vendor, Cisco [26] 19
00:30:19: RADIUS: cisco-nas-port [2] 13 "ISDN 1:D:23"
00:30:19: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:30:19: RADIUS: Service-Type [6] 6 Login [1]
00:30:19: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:30:20: RADIUS: Received from id 4 10.6.20.70:1708, Access-Accept, len 173
00:30:20: RADIUS: authenticator FF 0D 40 72 0D 80 12 26 - 44 13 D5 0E C4 BB 71 BE
00:30:20: RADIUS: Vendor, Cisco [26] 34
00:30:20: RADIUS: Cisco AVpair [1] 28 "h323-credit-amount=7777.77"
00:30:20: RADIUS: Vendor, Cisco [26] 26
00:30:20: RADIUS: Cisco AVpair [1] 20 "h323-return-code=0"
00:30:20: RADIUS: Vendor, Cisco [26] 30
00:30:20: RADIUS: h323-credit-time [102] 24 "h323-credit-time=54329"
00:30:20: RADIUS: Vendor, Cisco [26] 33
00:30:20: RADIUS: h323-billing-model [109] 27 "h323-billing-model=prepay"
00:30:20: RADIUS: Vendor, Cisco [26] 24
00:30:20: RADIUS: h323-currency [110] 18 "h323-currency=US"
00:30:20: RADIUS: Idle-Timeout [28] 6 30
00:30:20: RADIUS: Received from id E
00:30:43: ISDN Sel:23: RX <- DISCONNECT pd = 8 callref = 0x0004
00:30:43: Cause i = 0x8290 - Normal call clearing
00:30:43: %ISDN-6-DISCONNECT: Interface Serial1:22 disconnected from 4081234567 , call
lasted 37 seconds
00:30:43: ISDN Sel:23: TX -> RELEASE pd = 8 callref = 0x8004
00:30:43: ISDN Sel:23: RX <- RELEASE_COMP pd = 8 callref = 0x0004
00:30:43: RADIUS/ENCODE(0000000E): Unsupported AAA attribute timezone
00:30:43: RADIUS(0000000E): Encoding nas-port...Only port-type avlbl
00:30:43: RADIUS(0000000E): sending
00:30:43: RADIUS: Send to unknown id 7 10.6.20.70:1709, Accounting-Request, len 327
00:30:43: RADIUS: authenticator 99 5A B4 45 67 C0 F4 91 - 9B 4B C3 1D 7E DE 7D D1
00:30:43: RADIUS: Acct-Session-Id [44] 10 "0000000E"
00:30:43: RADIUS: Vendor, Cisco [26] 56
00:30:43: RADIUS: Conf-Id [24] 50 "h323-conf-id=6C29BC16 BF1911D3 8010E483
89ADC43B"
00:30:43: RADIUS: Vendor, Cisco [26] 31
00:30:43: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
00:30:43: RADIUS: Vendor, Cisco [26] 65
00:30:43: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=6C29BC16 BF1911D3
8010E483 89ADC43B"
00:30:43: RADIUS: Acct-Input-Octets [42] 6 0
00:30:43: RADIUS: Acct-Output-Octets [43] 6 161920
00:30:43: RADIUS: Acct-Input-Packets [47] 6 0
00:30:43: RADIUS: Acct-Output-Packets [48] 6 1012
00:30:43: RADIUS: Acct-Session-Time [46] 6 37
00:30:43: RADIUS: Vendor, Cisco [26] 35
00:30:43: RADIUS: Cisco AVpair [1] 29 "h323-ivr-out=Tariff:Unknown"
00:30:43: RADIUS: User-Name [1] 12 "4081234567"
00:30:43: RADIUS: Acct-Status-Type [40] 6 Stop [2]
00:30:43: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:30:43: RADIUS: Vendor, Cisco [26] 19
00:30:43: RADIUS: cisco-nas-port [2] 13 "ISDN 1:D:23"
00:30:43: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:30:43: RADIUS: Called-Station-Id [30] 7 "12346"
00:30:43: RADIUS: Service-Type [6] 6 Login [1]
00:30:43: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:30:43: RADIUS: Delay-Time [41] 6 0
00:30:43: RADIUS: Received from id 7 10.6.20.70:1709, Accounting-response, len 20
00:30:43: RADIUS: authenticator 78 80 AB D1 82 75 ED ED - E4 1F 12 25 D8 83 F9 6
!voice class aaa 3
is applied to dial-peer voice 1000 pots
and a call is made. voice class aaa 3
uses server 10.6.20.70 with auth port 1720 and acct port 1721. The radius daemon has not
started. AAA accounting and AAA authorization requests are sent to the appropriate server
but no acknowledgement is recieved. Retries are attempted.
00:37:03: %SYS-5-CONFIG_I: Configured from console by console

```

```

00:37:11: ISDN Se0:23: RX <- SETUP pd = 8 callref = 0x009E
00:37:11: Bearer Capability i = 0x8090A2
00:37:11: Channel ID i = 0xE1808397
00:37:11: Calling Party Number i = 0x0080, '4081234567', Plan:Unknown,
Type:Unknown
00:37:11: Called Party Number i = 0xE9, '12345', Plan:Private, Type:Abbreviated
00:37:11: RADIUS/ENCODE(00000010): Unsupported AAA attribute timezone
00:37:11: RADIUS(00000010): Encoding nas-port...Only port-type avlbl
00:37:11: RADIUS(00000010): sending
00:37:11: RADIUS: Send to unknown id 8 10.6.20.70:1721, Accounting-Request, len 414
00:37:11: RADIUS: authenticator EC F7 FD AB ED 0D 26 BF - F0 A4 D2 88 91 1E D9 22
00:37:11: RADIUS: Acct-Session-Id [44] 10 "00000010"
00:37:11: RADIUS: Vendor, Cisco [26] 56
00:37:11: RADIUS: h323-setup-time [25] 50 "h323-setup-time=*00:37:09.095 UTC Sat
Jan 1 2000"
00:37:11: RADIUS: Vendor, Cisco [26] 34
00:37:11: RADIUS: h323-gw-id [33] 28 "h323-gw-id=router."
00:37:11: RADIUS: Vendor, Cisco [26] 56
00:37:11: RADIUS: Conf-Id [24] 50 "h323-conf-id=69EAABEB BF1A11D3 8014E483
89ADC43B"
00:37:11: RADIUS: Vendor, Cisco [26] 31
00:37:11: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
00:37:11: RADIUS: Vendor, Cisco [26] 32
00:37:11: RADIUS: h323-call-type [27] 26 "h323-call-type=Telephony"
00:37:11: RADIUS: Vendor, Cisco [26] 65
00:37:11: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=69EAABEB BF1A11D3
8014E483 89ADC43B"
00:37:11: RADIUS: Vendor, Cisco [26] 30
00:37:11: RADIUS: Cisco AVpair [1] 24 "subscriber=RegularLine"
00:37:11: RADIUS: User-Name [1] 12 "4081234567"
00:37:11: RADIUS: Acct-Status-Type [40] 6 Start [1]
00:37:11: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:37:11: RADIUS: Vendor, Cisco [26] 19
00:37:11: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
00:37:11: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:37:11: RADIUS: Called-Station-Id [30] 7 "12345"
00:37:11: RADIUS: Service-Type [6] 6 Login [1]
00:37:11: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:37:11: RADIUS: Delay-Time [41] 6 0
00:37:11: ISDN Se0:23: TX -> CALL_PROC pd = 8 callref = 0x809E
00:37:11: Channel ID i = 0xA98397
00:37:11: ISDN Se0:23: TX -> CONNECT pd = 8 callref = 0x809E
00:37:11: ISDN Se0:23: RX <- CONNECT_ACK pd = 8 callref = 0x009E
00:37:11: ISDN Se0:23: CALL_PROGRESS: CALL_CONNECTED call id 0x65, bchan 22, dsl 0
00:37:11: %ISDN-6-CONNECT: Interface Serial0:22 is now connected to 4081234567
00:37:16: RADIUS: Retransmit id 8
00:37:16: RADIUS: acct-delay-time for 4021D9EC (at 4021DB84) now 5
00:37:17: %ISDN-6-CONNECT: Interface Serial0:22 is now connected to 4081234567
00:37:21: RADIUS: Retransmit id 1
00:37:21: RADIUS: acct-delay-time for 4021D9EC (at 4021DB84) now 10
00:37:26: RADIUS: Retransmit id 2
00:37:26: RADIUS: acct-delay-time for 4021D9EC (at 4021DB84) now 15
00:37:31: RADIUS: Tried all servers.
00:37:31: RADIUS: No valid server found. Trying any viable server
00:37:31: RADIUS: Tried all servers.
00:37:31: RADIUS: No response for id 3
00:37:31: RADIUS/DECODE: parse response no app start; FAIL
00:37:31: RADIUS/DECODE: parse response; FAIL
00:37:35: RADIUS(00000010): Encoding nas-port...Only port-type avlbl
00:37:35: RADIUS/ENCODE(00000010): acct_session_id: 16
00:37:35: RADIUS(00000010): sending
00:37:35: RADIUS: Send to unknown id 5 10.6.20.70:1720, Access-Request, len 199
00:37:35: RADIUS: authenticator 4B 6E 67 9F D4 1E 73 37 - 45 D3 CD 7C 70 FD C7 12
00:37:35: RADIUS: User-Name [1] 8 "777777"
00:37:35: RADIUS: User-Password [2] 18 *
00:37:35: RADIUS: Vendor, Cisco [26] 56
00:37:35: RADIUS: Conf-Id [24] 50 "h323-conf-id=61A46F2C 00000003 62E66E40
634A0A64"
00:37:35: RADIUS: Vendor, Cisco [26] 36
00:37:35: RADIUS: Cisco AVpair [1] 30 "h323-ivr-out=transactionID:5"
00:37:35: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:37:35: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:37:35: RADIUS: Vendor, Cisco [26] 19

```

```

00:37:35: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
00:37:35: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:37:35: RADIUS: Service-Type [6] 6 Login [1]
00:37:35: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:37:40: RADIUS: Retransmit id 5
00:37:45: RADIUS: Retransmit id 5
00:37:50: RADIUS: Retransmit id 5
00:37:55: RADIUS: Tried all servers.
00:37:55: RADIUS: No valid server found. Trying any viable server
00:37:55: RADIUS: Tried all servers.
00:37:55: RADIUS: No response for id 5
00:37:55: RADIUS/DECODE: parse response no app start; FAIL
00:37:55: RADIUS/DECODE: parse response; FAIL
00:38:00: %ISDN-6-DISCONNECT: Interface Serial0:22 disconnected from 4081234567 , call
lasted 48 seconds
00:38:00: ISDN Se0:23: TX -> DISCONNECT pd = 8 callref = 0x809E
00:38:00: Cause i = 0x8090 - Normal call clearing
00:38:00: RADIUS/ENCODE(00000010): Unsupported AAA attribute timezone
00:38:00: RADIUS(00000010): Encoding nas-port...Only port-type avlbl
00:38:00: RADIUS(00000010): sending
00:38:00: RADIUS: Send to unknown id 9 10.6.20.70:1721, Accounting-Request, len 660
00:38:00: RADIUS: authenticator C5 79 B7 D3 92 75 37 D0 - E7 5C 5B 84 99 6E 97 17
00:38:00: RADIUS: Acct-Session-Id [44] 10 "00000010"
00:38:00: RADIUS: Vendor, Cisco [26] 56
00:38:00: RADIUS: h323-setup-time [25] 50 "h323-setup-time=*00:37:09.095 UTC Sat
Jan 1 2000"
00:38:00: RADIUS: Vendor, Cisco [26] 34
00:38:00: RADIUS: h323-gw-id [33] 28 "h323-gw-id=router."
00:38:00: RADIUS: Vendor, Cisco [26] 56
00:38:00: RADIUS: Conf-Id [24] 50 "h323-conf-id=69EAABEB BF1A11D3 8014E483
89ADC43B"
00:38:00: RADIUS: Vendor, Cisco [26] 31
00:38:00: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
00:38:00: RADIUS: Vendor, Cisco [26] 32
00:38:00: RADIUS: h323-call-type [27] 26 "h323-call-type=Telephony"
00:38:00: RADIUS: Vendor, Cisco [26] 65
00:38:00: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=69EAABEB BF1A11D3
8014E483 89ADC43B"
00:38:00: RADIUS: Vendor, Cisco [26] 30
00:38:00: RADIUS: Cisco AVpair [1] 24 "subscriber=RegularLine"
00:38:00: RADIUS: Acct-Input-Octets [42] 6 0
00:38:00: RADIUS: Acct-Output-Octets [43] 6 112160
00:38:00: RADIUS: Acct-Input-Packets [47] 6 0
00:38:00: RADIUS: Acct-Output-Packets [48] 6 701
00:38:00: RADIUS: Acct-Session-Time [46] 6 49
00:38:00: RADIUS: Vendor, Cisco [26] 58
00:38:00: RADIUS: h323-connect-time [28] 52 "h323-connect-time=*00:37:09.109 UTC Sat
Jan 1 2000"
00:38:00: RADIUS: Vendor, Cisco [26] 61
00:38:00: RADIUS: h323-disconnect-tim[29] 55 "h323-disconnect-time=*00:37:57.739 UTC
Sat Jan 1 2000"
00:38:00: RADIUS: Vendor, Cisco [26] 34
00:38:00: RADIUS: h323-disconnect-cau[30] 28 "h323-disconnect-cause=10 "
00:38:00: RADIUS: Vendor, Cisco [26] 35
00:38:00: RADIUS: Cisco AVpair [1] 29 "h323-ivr-out=Tariff:Unknown"
00:38:00: RADIUS: Vendor, Cisco [26] 28
00:38:00: RADIUS: h323-voice-quality [31] 22 "h323-voice-quality=0"
00:38:00: RADIUS: User-Name [1] 12 "4081234567"
00:38:00: RADIUS: Acct-Status-Type [40] 6 Stop [2]
00:38:00: RADIUS: NAS-Port-Type [61] 6 Async [0]
00:38:00: RADIUS: Vendor, Cisco [26] 19
00:38:00: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
00:38:00: RADIUS: Calling-Station-Id [31] 12 "4081234567"
00:38:00: RADIUS: Called-Station-Id [30] 7 "12345"
00:38:00: RADIUS: Service-Type [6] 6 Login [1]
00:38:00: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
00:38:00: RADIUS: Delay-Time [41] 6 0
00:38:00: ISDN Se0:23: RX <- RELEASE pd = 8 callref = 0x009E
00:38:00: ISDN Se0:23: TX -> RELEASE_COMP pd = 8 callref = 0x809E
00:38:05: RADIUS: Retransmit id 9
00:38:05: RADIUS: acct-delay-time for 4021D9EC (at 4021DC7A) now 5
00:38:10: RADIUS: Retransmit id 4
00:38:10: RADIUS: acct-delay-time for 4021D9EC (at 4021DC7A) now 10

```

```

00:38:15: RADIUS: Retransmit id 5
00:38:15: RADIUS: acct-delay-time for 4021D9EC (at 4021DC7A) now 15
00:38:20: RADIUS: Tried all servers.
00:38:20: RADIUS: No valid server found. Trying any viable server
00:38:20: RADIUS: Tried all servers.
00:38:20: RADIUS: No response for id 6
00:38:20: RADIUS/DECODE: parse response no app start; FAIL
00:38:20: RADIUS/DECODE: parse response; FAIL

```

## Using Show Commands

- [show call accounting voice summary, page 8](#)
- [show call accounting-template voice template name, page 8](#)
- [show call aaa attributes, page 9](#)

### show call accounting voice summary

**show call accounting voice summary** command shows the status of all accounting templates that are defined, loaded.

```

show call accounting voice summary
name          url                                     last_load  is_running
=====
cdr1          tftp://10.255.255.255/johndoe/sanjose/ success  is running
cdr2          tftp://10.255.255.255/johndoe/sanjose/ success  is running

```

### show call accounting-template voice template name

**show call accounting-template voice <template name>** shows the VSAs that are contained in the accounting template.

```

show call accounting-template voice cdr1

CDR template cdr1 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
The last load was successful.
attr: h323-call-origin (56)
Totally 1 attrs defined.
show call accounting-template voice cdr2
CDR template cdr2 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr2.cdr
The last load was successful.
attr: h323-call-origin (56)
Totally 1 attrs defined.
!The output below results from defining a template that does not exist or that cannot be
reached.
router(config)#$://10.255.255.255/johndoe/sanjose/cdr/cdr4000.cdr

Reading cdr template cdr10 fail, put it on retry queue.
01:15:46: hifs ifs could not open file
!The output below is for a template with an invalid VSA.
sh call accounting-template voice cdr1
CDR template cdr1 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
The last load was successful.
attr: h323-call-origin (56)
Totally 1 attrs defined.
!Template cdr1.cdr is modified on the tftp server to enable an invalid VSA ( for example
h323-call-origin) to be put into the template.
call accounting-template voice reload cdr1
Loading johndoe/sanjose/cdr/cdr1.cdr from 10.255.255.255 (via Ethernet0): !
[OK - 88/4096 bytes]
cam: Fail to reload cdr template cdr1, unloading ...

```



```
02:27:29: hifs ifs file read succeeded. size=88,
url=tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
02:27:29: Error: attr name invalid-vs-a-h323-call-origin (0) is not valid in line 3.
sh call accounting-template voice cdr1

CDR template cdr1 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
Last load returned errno=8, Exec format error
attr: h323-call-origin (56)
Totally 1 attrs defined.
The template has been rejected, and previous template still applied.
```

## show call aaa attributes

**show call aaa attributes** displays the VSAs that are supported. Mandatory VSAs that are sent to the accounting server are not displayed.

```
sh call aaa attributes
AAA ATTRIBUTE LIST:
  Name=disc-cause-ext           Format=Enum
  Name=Acct-Status-Type        Format=Enum
  Name=acl                      Format=Ulong
  Name=addr                    Format=IP v4 Address
  .....
  Name=gw-password             Format=Binary
  Name=h323-billing-model      Format=String
  Name=h323-call-origin        Format=String
  .....
!Use the show call accounting-template voice summary
  command to check if a template is loaded and running.
!The output below shows two templates successfully loaded and running, and a template
  that failed to load.
show call accounting-template voice summary
name          url                                     last_load  is_running
=====
cdr1          tftp://10.255.255.255/johndoe/sanjose/ success  is running
cdr2          tftp://10.255.255.255/johndoe/sanjose/ success  is running
cdr10         tftp://10.255.255.255/johndoe/sanjose/ fail     is not running
!The output below shows reloading template cdr1 after modifying it.
!Initially, the original template cdr1 is loaded as shown:
show call accounting-template voice cdr1
CDR template cdr1 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
The last load was successful.
attr: h323-call-origin (56)
Totally 1 attrs defined.
!Additional VSAs are added to modify cdr1 on the tftp server as shown:
call accounting
call accounting-template voice reload cdr1
Loading johndoe/sanjose/cdr/cdr1.cdr from 10.255.255.255 (via Ethernet0): !
[OK - 1848/3072 bytes]
cam: Reload cdr template cdr1 success.
01:35:58: hifs ifs file read succeeded. size=1848,
url=tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
show call accounting-template voice cdr1
CDR template cdr1 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
The last load was successful.
attr: h323-call-origin (56)
attr: h323-call-type (57)
attr: h323-connect-time (59)
attr: h323-disconnect-cause (63)
attr: h323-disconnect-time (64)
attr: h323-gw-id (65)
attr: h323-remote-address (73)
attr: h323-remote-id (74)
attr: h323-setup-time (76)
attr: h323-voice-quality (78)
attr: subscriber (79)
attr: in-portgrp-id (80)
attr: out-portgrp-id (81)
```

```

attr: charged-units (82)
attr: disconnect-text (83)
attr: info-type (84)
attr: logical-if-index (85)
attr: peer-address (86)
attr: peer-id (87)
attr: peer-if-index (88)
attr: acom-level (89)
attr: tx-duration (90)
attr: voice-tx-duration (91)
attr: fax-tx-duration (92)
attr: noise-level (94)
attr: codec-bytes (95)
attr: coder-type-rate (96)
attr: early-packets (97)
attr: late-packets (98)
attr: lost-packets (99)
attr: gapfill-with-interpolation (100)
attr: gapfill-with-prediction (101)
attr: gapfill-with-redundancy (102)
attr: gapfill-with-silence (103)
attr: lowater-playout-delay (104)
attr: hiwater-playout-delay (105)
attr: ontime-rv-playout (106)
attr: receive-delay (107)
attr: round-trip-delay (108)
attr: remote-udp-port (109)
attr: session-protocol (110)
attr: vad-enable (111)
Totally 42 attrs defined.

```

## debug radius accounting

In the output below, cdr1 includes h323-call-origin but does not include VSA h323-gw-id. cdr2 includes h323-gw-id but does not include h323-call-origin.

```

show call accounting-template voice cdr1
CDR template cdr1 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr1.cdr
The last load was successful.
attr: h323-call-origin (56)
Totally 1 attrs defined.
show call accounting-template voice cdr2
CDR template cdr2 is running
url: tftp://10.255.255.255/johndoe/sanjose/cdr/cdr2.cdr
The last load was successful.
attr: h323-gw-id (65)
Totally 1 attrs defined.
!The output below is from a call that uses cdr1.cdr which allows only h323-call-origin.
debug radius accounting
Radius protocol debugging is on
Radius packet hex dump debugging is off
Radius packet protocol (authentication) debugging is off
Radius packet protocol (accounting) debugging is on
02:41:32: RADIUS/ENCODE(00000023): Unsupported AAA attribute timezone
02:41:32: RADIUS(00000023): Encoding nas-port...Only port-type avlbl
02:41:32: RADIUS(00000023): sending
02:41:32: RADIUS: Send to unknown id 26 10.6.20.70:1699, Accounting-Request, len
262
02:41:32: RADIUS:  authenticator 84 6E A0 C0 0F 27 79 03 - 59 96 FC 6C F4 17 05
4D
02:41:32: RADIUS:  Acct-Session-Id      [44] 10  "00000023"
02:41:32: RADIUS:  Vendor, Cisco          [26] 56
02:41:32: RADIUS:  Conf-Id              [24] 50  "h323-conf-id=C925CD59 BF2B11D3
8038E483 89ADC43B"
02:41:32: RADIUS:  Vendor, Cisco          [26] 31
02:41:32: RADIUS:  h323-call-origin      [26] 25  "h323-call-origin=answer"
02:41:32: RADIUS:  Vendor, Cisco          [26] 65
02:41:32: RADIUS:  Cisco AVpair         [1] 59  "h323-incoming-conf-id=C925CD59
BF2B11D3 8038E483 89ADC43B"
02:41:32: RADIUS:  User-Name            [1] 12  "4081234567"

```

```

02:41:32: RADIUS: Acct-Status-Type [40] 6 Start [1]
02:41:32: RADIUS: NAS-Port-Type [61] 6 Async [0]
02:41:32: RADIUS: Vendor, Cisco [26] 19
02:41:32: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
02:41:32: RADIUS: Calling-Station-Id [31] 12 "4081234567"
02:41:32: RADIUS: Called-Station-Id [30] 7 "12345"
02:41:32: RADIUS: Service-Type [6] 6 Login [1]
02:41:32: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
02:41:32: RADIUS: Delay-Time [41] 6 0
02:41:32: RADIUS: Received from id 26 10.6.20.70:1699, Accounting-response, len
20
02:41:32: RADIUS: authenticator 90 AD C8 09 60 D7 26 01 - DE E0 BC DC C1 F8 CA
2F
02:41:32: %ISDN-6-CONNECT: Interface Serial0:22 is now connected to 4081234567
02:41:38: %ISDN-6-CONNECT: Interface Serial0:22 is now connected to 4081234567
02:41:52: RADIUS(00000023): Encoding nas-port...Only port-type avlbl
02:41:59: %ISDN-6-DISCONNECT: Interface Serial0:22 disconnected from 4081234567
, call lasted 26 seconds
02:41:59: RADIUS/ENCODE(00000023): Unsupported AAA attribute timezone
02:41:59: RADIUS(00000023): Encoding nas-port...Only port-type avlbl
02:41:59: RADIUS(00000023): sending
02:41:59: RADIUS: Send to unknown id 27 10.6.20.70:1699, Accounting-Request, len
327
02:41:59: RADIUS: authenticator 13 B7 10 EE 1C 55 7A D2 - 0F 4A A5 2F 1F 85 0E
3A
02:41:59: RADIUS: Acct-Session-Id [44] 10 "00000023"
02:41:59: RADIUS: Vendor, Cisco [26] 56
02:41:59: RADIUS: Conf-Id [24] 50 "h323-conf-id=C925CD59 BF2B11D3
8038E483 89ADC43B"
02:41:59: RADIUS: Vendor, Cisco [26] 31
02:41:59: RADIUS: h323-call-origin [26] 25 "h323-call-origin=answer"
02:41:59: RADIUS: Vendor, Cisco [26] 65
02:41:59: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=C925CD59
BF2B11D3 8038E483 89ADC43B"
02:41:59: RADIUS: Acct-Input-Octets [42] 6 0
02:41:59: RADIUS: Acct-Output-Octets [43] 6 121600
02:41:59: RADIUS: Acct-Input-Packets [47] 6 0
02:41:59: RADIUS: Acct-Output-Packets [48] 6 760
02:41:59: RADIUS: Acct-Session-Time [46] 6 27
02:41:59: RADIUS: Vendor, Cisco [26] 35
02:41:59: RADIUS: Cisco AVpair [1] 29 "h323-ivr-out=Tariff:Unknown"
02:41:59: RADIUS: User-Name [1] 12 "4081234567"
02:41:59: RADIUS: Acct-Status-Type [40] 6 Stop [2]
02:41:59: RADIUS: NAS-Port-Type [61] 6 Async [0]
02:41:59: RADIUS: Vendor, Cisco [26] 19
02:41:59: RADIUS: cisco-nas-port [2] 13 "ISDN 0:D:23"
02:41:59: RADIUS: Calling-Station-Id [31] 12 "4081234567"
02:41:59: RADIUS: Called-Station-Id [30] 7 "12345"
02:41:59: RADIUS: Service-Type [6] 6 Login [1]
02:41:59: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
02:41:59: RADIUS: Delay-Time [41] 6 0
02:41:59: RADIUS: Received from id 27 10.6.20.70:1699, Accounting-response, len
20
02:41:59: RADIUS: authenticator 7F B2 88 3A 4A 96 05 C6 - D5 81 19 D8 25 3B 4D CB
!The output below is from the show debug
command.

```

**show debug****Radius protocol debugging is on****Radius packet protocol (accounting) debugging is on**

!The output below is from a call that uses cdr2 which allows h323-gw-id, but does not allow h323-call-origin.

RADIUS/ENCODE(00000025): Unsupported AAA attribute timezone

02:51:35: RADIUS(00000025): Encoding nas-port...Only port-type avlbl

02:51:35: RADIUS(00000025): sending

**02:51:35: RADIUS: Send to unknown id 28 10.6.20.70:1709, Accounting-Request, len 265**

02:51:35: RADIUS: authenticator 15 F0 7E AB 75 07 10 70 - 5E 3C 54 78 09 18 83 E5

02:51:35: RADIUS: Acct-Session-Id [44] 10 "00000025"

02:51:35: RADIUS: Vendor, Cisco [26] 34

02:51:35: RADIUS: h323-gw-id [33] 28 "h323-gw-id=router."

02:51:35: RADIUS: Vendor, Cisco [26] 56

02:51:35: RADIUS: Conf-Id [24] 50 "h323-conf-id=306F55DD BF2D11D3

```

803CE483 89ADC43B"
02:51:35: RADIUS: Vendor, Cisco [26] 65
02:51:35: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=306F55DD
BF2D11D3 803CE483 89ADC43B"
02:51:35: RADIUS: User-Name [1] 12 "4081234567"
02:51:35: RADIUS: Acct-Status-Type [40] 6 Start [1]
02:51:35: RADIUS: NAS-Port-Type [61] 6 Async [0]
02:51:35: RADIUS: Vendor, Cisco [26] 19
02:51:35: RADIUS: cisco-nas-port [2] 13 "ISDN 1:D:23"
02:51:35: RADIUS: Calling-Station-Id [31] 12 "4081234567"
02:51:35: RADIUS: Called-Station-Id [30] 7 "12346"
02:51:35: RADIUS: Service-Type [6] 6 Login [1]
02:51:35: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
02:51:35: RADIUS: Delay-Time [41] 6 0
02:51:35: %ISDN-6-CONNECT: Interface Serial1:22 is now connected to 4081234567
02:51:35: RADIUS: Received from id 28 10.6.20.70:1709, Accounting-response, len
20
02:51:35: RADIUS: authenticator D3 D8 59 42 2B 48 96 8D - 5E 2E D8 61 9A 9D 0D
5F
02:51:41: %ISDN-6-CONNECT: Interface Serial1:22 is now connected to 4081234567
02:51:43: %ISDN-6-DISCONNECT: Interface Serial1:22 disconnected from 4081234567
, call lasted 8 seconds
02:51:43: RADIUS/ENCODE(00000025): Unsupported AAA attribute timezone
02:51:43: RADIUS(00000025): Encoding nas-port...Only port-type avlbl
02:51:43: RADIUS(00000025): sending
02:51:43: RADIUS: Send to unknown id 29 10.6.20.70:1709, Accounting-Request, len
330
02:51:43: RADIUS: authenticator 55 35 AB CC 20 64 69 4B - 3F EE 79 04 11 E8 AE
4F
02:51:43: RADIUS: Acct-Session-Id [44] 10 "00000025"
02:51:43: RADIUS: Vendor, Cisco [26] 34
02:51:43: RADIUS: h323-gw-id [33] 28 "h323-gw-id=router."
02:51:43: RADIUS: Vendor, Cisco [26] 56
02:51:43: RADIUS: Conf-Id [24] 50 "h323-conf-id=306F55DD BF2D11D3
803CE483 89ADC43B"
02:51:43: RADIUS: Vendor, Cisco [26] 65
02:51:43: RADIUS: Cisco AVpair [1] 59 "h323-incoming-conf-id=306F55DD
BF2D11D3 803CE483 89ADC43B"
02:51:43: RADIUS: Acct-Input-Octets [42] 6 0
02:51:43: RADIUS: Acct-Output-Octets [43] 6 50240
02:51:43: RADIUS: Acct-Input-Packets [47] 6 0
02:51:43: RADIUS: Acct-Output-Packets [48] 6 314
02:51:43: RADIUS: Acct-Session-Time [46] 6 8
02:51:43: RADIUS: Vendor, Cisco [26] 35
02:51:43: RADIUS: Cisco AVpair [1] 29 "h323-ivr-out=Tariff:Unknown"
02:51:43: RADIUS: User-Name [1] 12 "4081234567"
02:51:43: RADIUS: Acct-Status-Type [40] 6 Stop [2]
02:51:43: RADIUS: NAS-Port-Type [61] 6 Async [0]
02:51:43: RADIUS: Vendor, Cisco [26] 19
02:51:43: RADIUS: cisco-nas-port [2] 13 "ISDN 1:D:23"
02:51:43: RADIUS: Calling-Station-Id [31] 12 "4081234567"
02:51:43: RADIUS: Called-Station-Id [30] 7 "12346"
02:51:43: RADIUS: Service-Type [6] 6 Login [1]
02:51:43: RADIUS: NAS-IP-Address [4] 6 10.5.20.100
02:51:43: RADIUS: Delay-Time [41] 6 0
02:51:43: RADIUS: Received from id 29 10.6.20.70:1709, Accounting-response, len
20
02:51:43: RADIUS: authenticator 45 31 ED 45 F4 06 ED 54 - 5E 6F 83 64 4D 2D 34
90

```

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