RADIUS를 사용하여 PPP 세션 및 유휴 시간 제한 할당

목차

소개 <u>사전 요구 사항</u> <u>요구 사항</u> <u>사용되는 구성 요소</u> <u>표기 규칙</u> 구성 <u>네트워크 다이어그램</u> <u>구성</u> 다음을 확인합니다. 문제 해결 문제 해결 명령 라우터 디버그 관련 정보

<u>소개</u>

이 구성에는 아날로그 회선을 통해 액세스 서버에 전화를 거는 모뎀이 포함된 Windows 95/98/NT 클라이언트가 통합되어 있습니다.사용자의 로그인은 라우터의 이더넷 세그먼트에 있는 RADIUS 서 버에서 인증되고 인증됩니다.이 문서의 Cisco Secure UNIX 및 Windows 프로필은 세션 및 유휴 시 간 초과에 표준 IETF(Internet Engineering Task Force) 특성을 사용합니다.값은 초 단위입니다.

이 문서에서는 NAS에서 전화 접속 액세스 또는 AAA를 위한 단계별 구성 지침을 제공하지 않습니 다.자세한 내용은 <u>전화 접속 클라이언트에 대한 기본 AAA RADIUS 구성을 참조하십시오</u>.

<u>사전 요구 사항</u>

<u>요구 사항</u>

이 문서에 대한 특정 요건이 없습니다.

<u>사용되는 구성 요소</u>

이 문서의 정보는 다음 소프트웨어 및 하드웨어 버전을 기반으로 합니다.

- Cisco IOS® 소프트웨어 릴리스 12.0(5.5)T
- Cisco Secure UNIX 버전 2.2.3
- Cisco Access Server 2511

이 문서의 정보는 특정 랩 환경의 디바이스를 토대로 작성되었습니다.이 문서에 사용된 모든 디바 이스는 초기화된(기본) 컨피그레이션으로 시작되었습니다.현재 네트워크가 작동 중인 경우, 모든 명령어의 잠재적인 영향을 미리 숙지하시기 바랍니다.

<u>표기 규칙</u>

문서 표기 규칙에 대한 자세한 내용은 <u>Cisco 기술 팁 표기 규칙을 참조하십시오</u>.

<u>구성</u>

<u>네트워크 다이어그램</u>

이 문서에서는 이 다이어그램에 표시된 네트워크 설정을 사용합니다.



<u>구성</u>

이 문서에서는 여기에 표시된 구성을 사용합니다.

- <u>Cisco Secure UNIX:RADIUS 프로파일</u>
- Windows용 Cisco Secure ACS
- <u>라우터 A</u>

Cisco Secure UNIX:RADIUS 프로파일
./ViewProfile -p 9900 -u radtime
User Profile Information
user = radtime{
<pre>profile_id = 99</pre>
<pre>profile_cycle = 2</pre>
member = raj
radius=IETF {
check_items= {
2=cisco
}
reply_attributes= {
6=2
7=1
27=180
28=60



Windows용 Cisco Secure ACS

NAS에 유휴 시간 제한을 전달하도록 Cisco Secure for Windows를 구성하려면 다음 단계를 완료합니다.

- 1. 왼쪽 막대에서 User Setup(사용자 설정) 버튼을 클릭합니다.
- 2. 해당 사용자로 이동합니다.
- 3. IETF RADIUS Attributes 섹션의 풀다운 메뉴**에서 Service-type (attribute 6) = Framed** and Framed-Protocol (attribute 7)=PPP를 선택합니다.참고: 선택한 특성 옆에 있는 확인란을 클릭 해야 합니다.서비스 유형 및 프레임 프로토콜.
- 4. 왼쪽 막대에서 Group Setup(그룹 설정) 버튼을 클릭합니다.사용자가 속한 그룹을 선택하고 Edit Settings를 클릭합니다.
- 5. IETF(Internet Engineering Task Force) RADIUS Attributes(IETF(Internet Engineering Task Force) RADIUS 특성) 섹션에서 Attribute 27 **Session-Timeout** and Attribute 28 Idle-**Timeout**(특성 27 **세션 시간 제한** 및 특성 28 유휴 시간 제한) 옆에 있는 확인란을 클릭합니다 .각 특성 옆의 상자에서 각 시간 제한(초)에 대해 원하는 값을 지정합니다.

라우터 A
Current configuration:
!
version 12.0
service timestamps debug datetime msec
service timestamps log uptime
no service password-encryption
!
hostname router_a
!
no logging console
! AAA configuration. The authorization statement is
needed ! to pass timeout values from ACS to the NAS.
aaa new-model
aaa authentication ppp default if-needed group radius
aaa authorization network default group radius
username john password doe
enable password clsco
:
no in domain-lookun
cns event-service server
· !
interface Ethernet0
ip address 171.68.201.53 255.255.255.0
no ip directed-broadcast
no ip route-cache
no ip mroute-cache
no cdp enable
!
interface Serial0
no ip address
no ip directed-broadcast

```
no ip mroute-cache
shutdown
no fair-queue
no cdp enable
1
interface Group-Async1
ip unnumbered Ethernet0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
dialer in-band
async mode dedicated
peer default ip address pool default
no cdp enable
ppp authentication pap
group-range 1 16
!
ip local pool default 10.1.1.1
ip classless
ip route 0.0.0.0 0.0.0.0 171.68.201.1
ip route 171.68.0.0 255.255.0.0 171.68.201.1
!--- Specify the RADIUS server host and key.
radius-server host 171.68.171.9 auth-port 1645 acct-port
1646
radius-server key ontop
1
line con 0
exec-timeout 0 0
timeout login response 60
transport input pad v120 telnet rlogin udptn
line 1 16
autoselect during-login
autoselect ppp
modem InOut
transport input all
speed 115200
line aux 0
timeout login response 60
line vty 0 4
exec-timeout 0 0
timeout login response 5
password cisco
1
end
```

<u>다음을 확인합니다.</u>

이 섹션에서는 컨피그레이션이 제대로 작동하는지 확인하는 데 사용할 수 있는 정보를 제공합니다.

일부 show 명령은 <u>출력 인터프리터 툴 에서 지원되는데(등록된 고객만), 이 툴을 사용하면</u> show 명 령 출력의 분석 결과를 볼 수 있습니다.

- show dialer interface async 1 DDR(Dial-on-demand routing) 다이얼러 프로파일에 대해 구성 된 인터페이스에 대한 정보를 표시합니다.
- show interfaces async 1 직렬 인터페이스 정보를 표시합니다.

이 **show** 명령 출력은 세션 및 유휴 시간 제한이 올바르게 다운로드되었는지 확인하는 방법을 보여 줍니다.이 명령을 여러 번 실행하는 것이 좋습니다.이렇게 하면 카운터가 감소하는 것을 관찰할 수

있습니다.

router#show dialer interface async 1 Async1 - dialer type = IN-BAND ASYNC NO-PARITY !--- Check to see that the idletime is 60 seconds for this interface. !--- This was configured in the RADIUS server. Idle timer (60 sec), Fast idle timer (20 secs) Wait for carrier (30 secs), Re-enable (15 secs) Dialer state is data link layer up Time until disconnect 40 secs (radtime) Dial String Successes Failures Last DNIS Last status router#show interface async 1 Async1 is up, line protocol is up Hardware is Async Serial Interface is unnumbered. Using address of Ethernet0 (171.68.201.53) MTU 1500 bytes, BW 115 Kbit, DLY 100000 usec, reliability 253/255, txload 1/255, rxload 1/255 Encapsulation PPP, loopback not set Keepalive not set DTR is pulsed for 5 seconds on reset !--- The session (absolute) and idletime decreases. Time to interface disconnect: absolute 00:02:41, idle 00:00:36 LCP Open Open: IPCP Last input 00:00:18, output 00:00:18, output hang never Last clearing of "show interface" counters 3w0d Input queue: 1/75/0 (size/max/drops); Total output drops: 0 Queueing strategy: weighted fair Output queue: 0/1000/64/0 (size/max total/threshold/drops) Conversations 0/1/16 (active/max active/max total) Reserved Conversations 0/0 (allocated/max allocated) 5 minute input rate 0 bits/sec, 0 packets/sec 5 minute output rate 0 bits/sec, 0 packets/sec 3543 packets input, 155629 bytes, 0 no buffer Received 0 broadcasts, 0 runts, 0 giants, 0 throttles 46 input errors, 46 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort 1903 packets output, 44205 bytes, 0 underruns 0 output errors, 0 collisions, 44 interface resets 0 output buffer failures, 0 output buffers swapped out 0 carrier transitions router#show interface async 1 Async1 is up, line protocol is up Hardware is Async Serial Interface is unnumbered. Using address of Ethernet0 (171.68.201.53) MTU 1500 bytes, BW 115 Kbit, DLY 100000 usec, reliability 255/255, txload 1/255, rxload 1/255 Encapsulation PPP, loopback not set Keepalive not set DTR is pulsed for 5 seconds on reset !--- The user is disconnected because the session !--- timeout (absolute) is reached. Time to interface disconnect: absolute 00:00:00, idle 00:00:56 LCP Open Open: IPCP Last input 00:00:02, output 00:00:03, output hang never Last clearing of "show interface" counters 3w0d Input queue: 1/75/0 (size/max/drops); Total output drops: 0 Queueing strategy: weighted fair Output queue: 0/1000/64/0 (size/max total/threshold/drops) Conversations 0/1/16 (active/max active/max total)

Reserved Conversations 0/0 (allocated/max allocated)

- 5 minute input rate 0 bits/sec, 1 packets/sec
- 5 minute output rate 0 bits/sec, 0 packets/sec 3674 packets input, 163005 bytes, 0 no buffer Received 0 broadcasts, 0 runts, 0 giants, 0 throttles 46 input errors, 46 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort 1984 packets output, 49146 bytes, 0 underruns 0 output errors, 0 collisions, 44 interface resets 0 output buffer failures, 0 output buffers swapped out 0 carrier transitions

<u>문제 해결</u>

이 섹션에서는 컨피그레이션 문제를 해결하는 데 사용할 수 있는 정보를 제공합니다.

<u>문제 해결 명령</u>

참고: debug 명령을 실행하기 전에 <u>디버그 명령에 대한 중요 정보를 참조하십시오</u>.

- debug ppp authentication—인증 프로토콜 메시지를 표시합니다.이러한 메시지에는 CHAP(Challenge Authentication Protocol) 패킷 교환과 PAP(Password Authentication Protocol) 교환이 포함됩니다.
- debug ppp negotiation PPP 시작 중에 전송된 PPP(Point-to-Point Protocol) 패킷을 표시합니 다. 여기서 PPP 옵션은 협상됩니다.
- debug aaa authorization AAA/RADIUS 권한 부여에 대한 정보를 표시합니다.
- debug radius RADIUS와 관련된 자세한 디버깅 정보를 표시합니다.

<u>라우터 디버그</u>

이 디버그 출력은 성공적인 연결을 보여줍니다.

```
*Mar 22 21:11:02.797: AAA: parse name=tty1 idb type=10 tty=1
*Mar 22 21:11:02.801: AAA: name=tty1 flags=0x11 type=4 shelf=0
  slot=0 adapter=0 port=1 channel=0
*Mar 22 21:11:02.801: AAA/MEMORY: create_user (0x57F3A8) user='' ruser=''
  port='ttyl' rem_addr='async' authen_type=ASCII service=LOGIN priv=1
*Mar 22 21:11:02.833: AAA/MEMORY: free_user (0x57F3A8) user='' ruser=''
  port='ttyl' rem_addr='async' authen_type=ASCII service=LOGIN priv=1
*Mar 22 21:11:02.909: As1 IPCP: Install route to 10.1.1.1
*Mar 22 21:11:04.869: As1 LCP: I CONFREQ [Closed] id 0 len 23
                               ACCM 0x0000000 (0x02060000000)
*Mar 22 21:11:04.873: As1 LCP:
*Mar 22 21:11:04.877: As1 LCP: MagicNumber 0x00005F22 (0x050600005F22)
*Mar 22 21:11:04.877: As1 LCP: PFC (0x0702)
*Mar 22 21:11:04.881: As1 LCP: ACFC (0x0802)
*Mar 22 21:11:04.881: As1 LCP: Callback 6 (0x0D0306)
*Mar 22 21:11:04.885: As1 LCP: Lower layer not up, Fast Starting
*Mar 22 21:11:04.889: As1 PPP: Treating connection as a callin
*Mar 22 21:11:04.889: As1 PPP: Phase is ESTABLISHING, Passive Open
*Mar 22 21:11:04.893: As1 LCP: State is Listen
*Mar 22 21:11:04.897: As1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
*Mar 22 21:11:04.901: As1 LCP: O CONFREQ [Listen] id 104 len 24
*Mar 22 21:11:04.901: As1 LCP: ACCM 0x000A0000 (0x0206000A0000)
*Mar 22 21:11:04.905: As1 LCP: AuthProto PAP (0x0304C023)
*Mar 22 21:11:04.909: As1 LCP: MagicNumber 0x812C7E0C (0x0506812C7E0C)
*Mar 22 21:11:04.913: As1 LCP: PFC (0x0702)
*Mar 22 21:11:04.913: As1 LCP: ACFC (0x0802)
```

*Mar 22 21:11:04.917: As1 LCP: O CONFREJ [Listen] id 0 len 7 *Mar 22 21:11:04.921: As1 LCP: Callback 6 (0x0D0306) 3w0d: %LINK-3-UPDOWN: Interface Async1, changed state to up *Mar 22 21:11:06.897: As1 LCP: TIMEout: State REQsent *Mar 22 21:11:06.901: As1 LCP: O CONFREQ [REQsent] id 105 len 24 *Mar 22 21:11:06.901: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) *Mar 22 21:11:06.905: As1 LCP: AuthProto PAP (0x0304C023) *Mar 22 21:11:06.909: As1 LCP: MagicNumber 0x812C7E0C (0x0506812C7E0C) *Mar 22 21:11:06.909: As1 LCP: PFC (0x0702) *Mar 22 21:11:06.913: As1 LCP: ACFC (0x0802) *Mar 22 21:11:07.045: As1 LCP: I CONFACK [REQsent] id 105 len 24 *Mar 22 21:11:07.049: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) *Mar 22 21:11:07.053: As1 LCP: AuthProto PAP (0x0304C023) *Mar 22 21:11:07.057: As1 LCP: MagicNumber 0x812C7E0C (0x0506812C7E0C) *Mar 22 21:11:07.057: As1 LCP: PFC (0x0702) *Mar 22 21:11:07.061: As1 LCP: ACFC (0x0802) *Mar 22 21:11:07.821: As1 LCP: I CONFREQ [ACKrcvd] id 0 len 23 *Mar 22 21:11:07.825: As1 LCP: ACCM 0x00000000 (0x02060000000) *Mar 22 21:11:07.829: As1 LCP: MagicNumber 0x00005F22 (0x050600005F22) *Mar 22 21:11:07.829: As1 LCP: PFC (0x0702) *Mar 22 21:11:07.833: As1 LCP: ACFC (0x0802) *Mar 22 21:11:07.833: As1 LCP: Callback 6 (0x0D0306) *Mar 22 21:11:07.837: As1 LCP: O CONFREJ [ACKrcvd] id 0 len 7 *Mar 22 21:11:07.841: As1 LCP: Callback 6 (0x0D0306) *Mar 22 21:11:07.957: As1 LCP: I CONFREQ [ACKrcvd] id 1 len 20 *Mar 22 21:11:07.961: As1 LCP: ACCM 0x00000000 (0x02060000000) *Mar 22 21:11:07.961: As1 LCP: MagicNumber 0x00005F22 (0x050600005F22) *Mar 22 21:11:07.965: As1 LCP: PFC (0x0702) *Mar 22 21:11:07.969: As1 LCP: ACFC (0x0802) *Mar 22 21:11:07.969: As1 LCP: O CONFACK [ACKrcvd] id 1 len 20 *Mar 22 21:11:07.973: As1 LCP: ACCM 0x00000000 (0x02060000000) *Mar 22 21:11:07.977: As1 LCP: MagicNumber 0x00005F22 (0x050600005F22) *Mar 22 21:11:07.977: As1 LCP: PFC (0x0702) *Mar 22 21:11:07.981: As1 LCP: ACFC (0x0802) *Mar 22 21:11:07.985: As1 LCP: State is Open *Mar 22 21:11:07.985: As1 PPP: Phase is AUTHENTICATING, by this end *Mar 22 21:11:08.245: As1 LCP: I IDENTIFY [Open] id 2 len 18 magic 0x00005F22 MSRASV4.00 *Mar 22 21:11:08.249: As1 LCP: I IDENTIFY [Open] id 3 len 31 magic 0x00005F22 MSRAS-1-RAJESH-SECURITY *Mar 22 21:11:08.253: As1 PAP: I AUTH-REQ id 30 len 18 from "radtime" *Mar 22 21:11:08.265: As1 PAP: Authenticating peer radtime *Mar 22 21:11:08.269: AAA: parse name=Async1 idb type=10 tty=1 *Mar 22 21:11:08.273: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0 adapter=0 port=1 channel=0 *Mar 22 21:11:08.273: AAA/MEMORY: create_user (0x57F3A8) user='radtime' ruser='' port='Async1' rem_addr='async' authen_type=PAP service=PPP priv=1 *Mar 22 21:11:08.281: RADIUS: ustruct sharecount=1 *Mar 22 21:11:08.285: RADIUS: Initial Transmit Async1 id 109 172.16.171.9:1645, Access-Request, len 77 Attribute 4 6 AB44C935 *Mar 22 21:11:08.289: Attribute 5 6 0000001 *Mar 22 21:11:08.293: *Mar 22 21:11:08.293: Attribute 61 6 0000000 *Mar 22 21:11:08.297: Attribute 1 9 72616474 *Mar 22 21:11:08.297: Attribute 2 18 486188E4 Attribute 6 6 0000002 *Mar 22 21:11:08.301: Attribute 7 6 0000001 *Mar 22 21:11:08.301: *Mar 22 21:11:08.329: RADIUS: Received from id 109 172.16.171.9:1645, Access-Accept, len 44 Attribute 6 6 00000002 Attribute 7 6 00000001 *Mar 22 21:11:08.333: *Mar 22 21:11:08.333: Attribute 27 6 000000B4 *Mar 22 21:11:08.337: *Mar 22 21:11:08.337: Attribute 28 6 000003C

debug radius 명령의 AVP(특성 값 쌍)를 **디코딩해야** 합니다.따라서 NAS와 RADIUS 서버 간의 트 랜잭션을 더 잘 이해할 수 있습니다.

참고: Cisco IOS Software Release 12.2(11)T부터 debug **radius** 명령의 출력이 이미 디코딩되었습 니다.출력 인터프리터 <u>툴(등록된</u> 고객만)을 사용하여 출력을 디코딩할 필요는 *없습니다*.자세한 내 용은 <u>RADIUS 디버그 개선 사항</u>을 참조하십시오.

Output Interpreter Tool(등록된 고객만 해당)을 사용하면 debug radius 명령 출력에 대한 분석을 받 을 수 있습니다.

기울임꼴로 출력된 결과는 Output Interpreter <u>Tool</u>에서 얻은 <u>결과입니다(등록된</u> 고객만 해당).

Access-Request 172.16.171.9:1645 id 109 Attribute Type 4: NAS-IP-Address is 171.68.201.53 Attribute Type 5: NAS-Port is 1 Attribute Type 61: NAS-Port-Type is Asynchronous Attribute Type 1: User-Name is radt Attribute Type 2: User-Password is (encoded) Attribute Type 6: Service-Type is Framed Attribute Type 7: Framed-Protocol is PPP Access-Accept 172.16.171.9:1645 id 109 Attribute Type 6: Service-Type is Framed Attribute Type 7: Framed-Protocol is PPP Attribute Type 7: Framed-Protocol is PPP Attribute Type 7: Session-Timeout is 180 seconds Attribute Type 28: Idle-Timeout is 60 seconds

세션 시간 제한은 180초이고 유휴 시간 제한은 60초입니다.

```
*Mar 22 21:11:08.345: RADIUS: saved authorization data for user 57F3A8 at 5AB9A4
*Mar 22 21:11:08.349: As1 AAA/AUTHOR/LCP: Authorize LCP
*Mar 22 21:11:08.353: As1 AAA/AUTHOR/LCP (2107569326): Port='Async1'
  list='' service=NET
*Mar 22 21:11:08.353: AAA/AUTHOR/LCP: As1 (2107569326) user='radtime'
*Mar 22 21:11:08.357: As1 AAA/AUTHOR/LCP (2107569326): send AV service=ppp
*Mar 22 21:11:08.357: As1 AAA/AUTHOR/LCP (2107569326): send AV protocol=lcp
*Mar 22 21:11:08.361: As1 AAA/AUTHOR/LCP (2107569326): found list "default"
*Mar 22 21:11:08.365: As1 AAA/AUTHOR/LCP (2107569326): Method=radius (radius)
*Mar 22 21:11:08.369: As1 AAA/AUTHOR (2107569326): Post authorization
  status = PASS REPL
*Mar 22 21:11:08.369: As1 AAA/AUTHOR/LCP: Processing AV service=ppp
!--- The session timeout and idle timeouts are applied to the interface. *Mar 22 21:11:08.373:
As1 AAA/AUTHOR/LCP: Processing AV timeout=180
*Mar 22 21:11:08.633: As1 AAA/AUTHOR/LCP: Processing AV idletime=60
*Mar 22 21:11:09.049: As1 PAP: O AUTH-ACK id 30 len 5
*Mar 22 21:11:09.053: As1 PPP: Phase is UP
*Mar 22 21:11:09.057: As1 AAA/AUTHOR/FSM: (0): Can we start IPCP?
*Mar 22 21:11:09.061: As1 AAA/AUTHOR/FSM (1853995855): Port='Async1'
  list='' service=NET
*Mar 22 21:11:09.061: AAA/AUTHOR/FSM: As1 (1853995855) user='radtime'
*Mar 22 21:11:09.065: As1 AAA/AUTHOR/FSM (1853995855): send AV service=ppp
*Mar 22 21:11:09.065: As1 AAA/AUTHOR/FSM (1853995855): send AV protocol=ip
*Mar 22 21:11:09.069: As1 AAA/AUTHOR/FSM (1853995855): found list "default"
*Mar 22 21:11:09.073: As1 AAA/AUTHOR/FSM (1853995855): Method=radius (radius)
*Mar 22 21:11:09.077: As1 AAA/AUTHOR (1853995855): Post authorization
  status = PASS REPL
*Mar 22 21:11:09.077: As1 AAA/AUTHOR/FSM: We can start IPCP
*Mar 22 21:11:09.085: As1 IPCP: O CONFREQ [Closed] id 19 len 10
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*Mar 22 21:11:09.089: As1 IPCP:
                                  Address 171.68.201.53 (0x0306AB44C935)
*Mar 22 21:11:09.177: As1 CCP: I CONFREQ [Not negotiated] id 4 len 10
*Mar 22 21:11:09.181: As1 CCP: MS-PPC supported bits 0x00000001
  (0x12060000001)
*Mar 22 21:11:09.185: As1 LCP: O PROTREJ [Open] id 106 len 16
  protocol CCP (0x80FD0104000A12060000001)
*Mar 22 21:11:09.189: As1 IPCP: I CONFREQ [REQsent] id 5 len 40
*Mar 22 21:11:09.193: As1 IPCP:
                                  CompressType VJ 15 slots
  CompressSlotID (0x0206002D0F01)
*Mar 22 21:11:09.197: As1 IPCP: Address 0.0.0.0 (0x03060000000)
*Mar 22 21:11:09.201: As1 IPCP: PrimaryDNS 0.0.0.0 (0x81060000000)
*Mar 22 21:11:09.205: As1 IPCP: PrimaryWINS 0.0.0.0 (0x82060000000)
*Mar 22 21:11:09.209: As1 IPCP: SecondaryDNS 0.0.0.0 (0x83060000000)
*Mar 22 21:11:09.213: As1 IPCP: SecondaryWINS 0.0.0.0 (0x84060000000)
*Mar 22 21:11:09.213: As1 AAA/AUTHOR/IPCP: Start.
  Her address 0.0.0.0, we want 10.1.1.1
*Mar 22 21:11:09.217: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
*Mar 22 21:11:09.221: As1 AAA/AUTHOR/IPCP: Authorization succeeded
*Mar 22 21:11:09.221: As1 AAA/AUTHOR/IPCP: Done.
  Her address 0.0.0.0, we want 10.1.1.1
*Mar 22 21:11:09.229: As1 IPCP: O CONFREJ [REQsent] id 5 len 34
*Mar 22 21:11:09.229: As1 IPCP:
                                  CompressType VJ 15 slots
  CompressSlotID (0x0206002D0F01)
*Mar 22 21:11:09.233: As1 IPCP: PrimaryDNS 0.0.0.0 (0x81060000000)
*Mar 22 21:11:09.237: As1 IPCP: PrimaryWINS 0.0.0.0 (0x82060000000)
*Mar 22 21:11:09.241: As1 IPCP: SecondaryDNS 0.0.0.0 (0x83060000000)
*Mar 22 21:11:09.245: As1 IPCP: SecondaryWINS 0.0.0.0 (0x84060000000)
*Mar 22 21:11:09.249: As1 IPCP: I CONFACK [REQsent] id 19 len 10
*Mar 22 21:11:09.253: As1 IPCP:
                                 Address 171.68.201.53 (0x0306AB44C935)
*Mar 22 21:11:09.673: As1 IPCP: I CONFREQ [ACKrcvd] id 6 len 10
*Mar 22 21:11:09.677: Asl IPCP: Address 0.0.0.0 (0x03060000000)
*Mar 22 21:11:09.681: As1 AAA/AUTHOR/IPCP: Start.
  Her address 0.0.0.0, we want 10.1.1.1
*Mar 22 21:11:09.685: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
*Mar 22 21:11:09.685: As1 AAA/AUTHOR/IPCP: Authorization succeeded
*Mar 22 21:11:09.689: As1 AAA/AUTHOR/IPCP: Done.
  Her address 0.0.0.0, we want 10.1.1.1
*Mar 22 21:11:09.693: As1 IPCP: O CONFNAK [ACKrcvd] id 6 len 10
*Mar 22 21:11:09.697: As1 IPCP: Address 10.1.1.1 (0x03060A010101)
*Mar 22 21:11:09.813: As1 IPCP: I CONFREQ [ACKrcvd] id 7 len 10
*Mar 22 21:11:09.817: As1 IPCP: Address 10.1.1.1 (0x03060A010101)
*Mar 22 21:11:09.821: As1 AAA/AUTHOR/IPCP: Start.
  Her address 10.1.1.1, we want 10.1.1.1
*Mar 22 21:11:09.825: As1 AAA/AUTHOR/IPCP (1344088998): Port='Async1'
  list='' service=NET
*Mar 22 21:11:09.829: AAA/AUTHOR/IPCP: As1 (1344088998) user='radtime'
*Mar 22 21:11:09.833: As1 AAA/AUTHOR/IPCP (1344088998): send AV service=ppp
*Mar 22 21:11:09.833: As1 AAA/AUTHOR/IPCP (1344088998): send AV protocol=ip
*Mar 22 21:11:09.837: As1 AAA/AUTHOR/IPCP (1344088998): send AV addr*10.1.1.1
*Mar 22 21:11:09.837: As1 AAA/AUTHOR/IPCP (1344088998): found list "default"
*Mar 22 21:11:09.841: As1 AAA/AUTHOR/IPCP (1344088998): Method=radius (radius)
*Mar 22 21:11:09.845: As1 AAA/AUTHOR (1344088998): Post authorization
  status = PASS_REPL
*Mar 22 21:11:09.849: As1 AAA/AUTHOR/IPCP: Reject 10.1.1.1, using 10.1.1.1
*Mar 22 21:11:09.853: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
*Mar 22 21:11:09.857: As1 AAA/AUTHOR/IPCP: Processing AV addr*10.1.1.1
*Mar 22 21:11:09.857: As1 AAA/AUTHOR/IPCP: Authorization succeeded
*Mar 22 21:11:09.861: As1 AAA/AUTHOR/IPCP: Done.
  Her address 10.1.1.1, we want 10.1.1.1
*Mar 22 21:11:09.865: As1 IPCP: O CONFACK [ACKrcvd] id 7 len 10
*Mar 22 21:11:09.869: As1 IPCP: Address 10.1.1.1 (0x03060A010101)
*Mar 22 21:11:09.873: As1 IPCP: State is Open
*Mar 22 21:11:09.885: As1 IPCP: Install route to 10.1.1.1
3w0d: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1,
```

<u>관련 정보</u>

- 전화 접속 클라이언트에 대한 기본 AAA RADIUS 구성
- <u>RADIUS 지원 페이지</u>
- <u>Cisco Secure UNIX 지원 페이지</u>
- Livingston Server로 RADIUS 구성
- RFC(Request for Comments)
- <u>Technical Support Cisco Systems</u>