

# Настройка обратного вызова PPP с помощью RADIUS

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## **Введение**

В этом документе приведены примеры настройки маршрутизатора и сервера таким образом, чтобы они могли делать обратные вызовы по протоколу Point-to-Point Protocol (PPP) с помощью RADIUS.

## **Перед началом работы**

### **Условные обозначения**

[Дополнительные сведения об условных обозначениях см. в документе Технические рекомендации Cisco. Условные обозначения.](#)

## Предварительные условия

Для работы необходимо:

- Выполните начальное тестирование с локальной аутентификацией и обратным вызовом (то есть, удалите команду `aaa new-model`). Если функция обратного вызова не работает с локальной проверкой подлинности, она не будет работать и с RADIUS. [См. пример использования локальной аутентификации.](#)
- Продолжите тестирование аутентификации PPP с сервером RADIUS без обратного вызова. Если пользователи не прошли аутентификацию и/или авторизацию без обратного вызова, аутентификация и авторизация с обратным вызовом не будет работать.
- После включения локальной аутентификации для обратного вызова и аутентификации PPP с RADIUS добавьте информацию от локального пользователя на маршрутизаторе (например, строку набора обратного вызова) к профилю пользователя на сервере.

**Примечание:** В этих тестах пользователем был NT 4.0 сервер, DUN, настроенный как обычно для соединения через протокол PPP, но разрешающие расширения PPP/LCP проверены сервером для обеспечения обратного вызова Microsoft. Управление обратными вызовами Microsoft поддерживается в Версиях 11.3.2. T программного обеспечения Cisco IOS и позже. Для определенной информации о том, как установить ваш Microsoft Windows PC для Обратного вызова, обратитесь к Веб-узлу Microsoft.

## Используемые компоненты

При разработке и тестировании этой конфигурации использовались следующие версии программного обеспечения.

- Cisco IOS Software Release 11.3. 2. T и позже
- CiscoSecure ACS UNIX 2.x или CiscoSecure ACS для Windows 2.x или выше

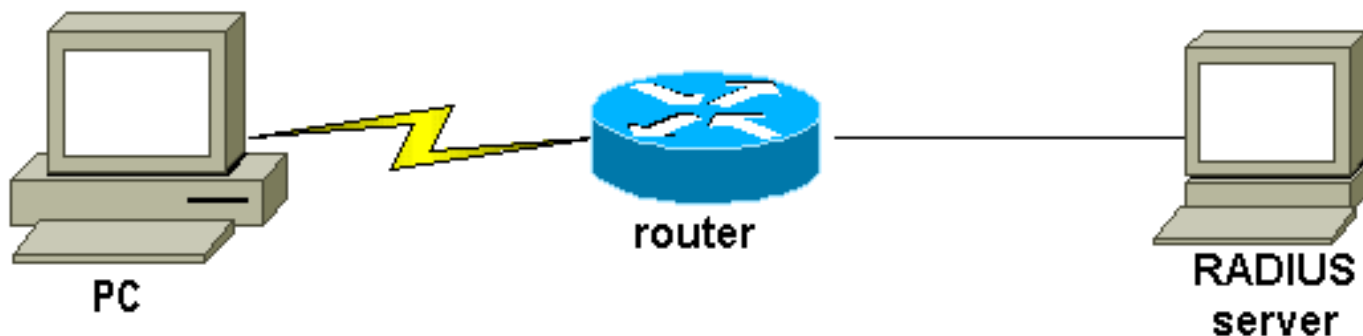
## Настройка

В этом разделе содержатся сведения о настройке функций, описанных в этом документе.

**Примечание:** [Поиск дополнительной информации о командах в данном документе можно выполнить с помощью средства "Command Lookup" \(Поиск команд\) \(только для зарегистрированных клиентов\).](#)

## Схема сети

В данном документе используется сетевая установка, показанная на следующей схеме.



## [Настройка сервера CiscoSecure NT](#)

- Для пользователя отображается окно ввода и подтверждения пароля.
- В параметрах группы: атрибут сервис 006 – тип = форматный атрибут 007 форматный протокол = протокол двухточечного соединения
- В последней коробке на экране, Атрибутах сервера RADIUS для Cisco, проверьте [009\001 - пару значение-атрибут] и внизу, войдите: `lcp:callback-dialstring=20367`

## [Установка сервера CiscoSecure UNIX](#)

```
rtp-berry# ./ViewProfile -p 9900 -u callback
User Profile Information
user = callback{
profile_id = 34
profile_cycle = 1
radius=Cisco {
check_items= {
2="callback"
}
reply_attributes= {
6=2
7=1
9,1="lcp:callback-dialstring=20367"
}
}
}
```

## [Настройка сервера Livingston RADIUS \(с Cisco av-pair\)](#)

```
callback2 Password = "callback2"
User-Service-Type = Framed-User,
Framed-Protocol = PPP,
cisco-avpair = "lcp:callback-dialstring=20367"
```

## [Конфигурации](#)

### **Настройка маршрутизатора**

```
rtpkrb#show run Building configuration... Current
configuration: ! version 11.3 service timestamps debug
uptime service timestamps log uptime no service
password-encryption service udp-small-servers service
tcp-small-servers ! hostname rtpkrb ! !--- AAA
configuration. aaa new-model aaa authentication login
```

```
default radius none aaa authentication ppp default
radius none aaa authorization exec default radius none
aaa authorization network default radius none enable
secret 5 $1$pkX.$JdAysRElSbdbDe7bj0wyt0 enable password
ww ! ip host rtpkrb 10.31.1.5 ip domain-name
RTP.CISCO.COM ip name-server 171.68.118.103 !--- Chat-
scripts to be used for the dialout. chat-script offhook
"" "ATH1" OK chat-script callback ABORT ERROR ABORT BUSY
"" "ATZ" OK "ATDT \T" TIMEOUT 30 CONNECT \c ! interface
Loopback0 ip address 1.1.1.1 255.255.255.0 ! interface
Ethernet0 ip address 10.31.1.5 255.255.0.0 ! interface
Serial0 no ip address no ip mroute-cache shutdown !
interface Serial1 no ip address shutdown ! interface
Async1 ip unnumbered Ethernet0 encapsulation ppp async
mode dedicated peer default ip address pool async no cdp
enable ppp max-bad-auth 3 ppp callback accept ppp
authentication pap ! ip local pool async 15.15.15.15 ip
classless ip route 0.0.0.0 0.0.0.0 10.31.1.1 snmp-server
community public RW snmp-server host 171.68.118.100
traps public radius-server host 171.68.118.101 auth-port
1645 acct-port 1646 radius-server key cisco ! line con 0
line 1 session-timeout 20 exec-timeout 20 0 password ww
autoselect ppp script modem-off-hook offhook script
callback callback modem InOut transport input all
stopbits 1 speed 38400 flowcontrol hardware line 2 modem
InOut speed 38400 flowcontrol hardware line 3 16 line
aux 0 line vty 0 4 exec-timeout 0 0 timeout login
response 100 password ww ! end
```

## Проверка

В настоящее время для этой конфигурации нет процедуры проверки.

## Устранение неполадок

В этом разделе описывается процесс устранения неполадок конфигурации.

### Команды для устранения неполадок

Примечание: Прежде чем применять команды отладки, ознакомьтесь с разделом "Важные сведения о командах отладки".

- **debug aaa authentication** – отображает сведения о проверке подлинности AAA.
- **"debug aaa authorization"** - отображение сведений об авторизации AAA.
- **debug callback** - Отображает события обратного вызова, когда маршрутизатор использует модем и сценарий разговора для обратного вызова на линии терминала.
- **debug chat** - Отображает символы, которыми обмениваются сервер сетевого доступа (NAS) и ПК. Сценарий диалогового взаимодействия – это набор пар "строка ожидания - посылаемая строка", которые определяют подтверждение связи между устройствами оборудования терминала данных (DTE)-DTE или оборудования для передачи DTE-данных (DCE).
- **debug modem** - эта команда выводит активность линии модема для сервера доступа.
- **debug ppp negotiation** – Показывает PPP-пакеты, переданные при запусках PPP с согласованием параметров PPP.

- **debug ppp authentication** – отображает сообщения протокола аутентификации, включая обмен пакетами по протоколу аутентификации с предварительным согласованием вызова (CHAP) и обмен пакетами протокола аутентификации по паролю (PAP).
- **debug radius** – вывод подробных отладочных данных, связанных с RADIUS.

## Пример результата отладки

```

General OS:
Modem control/process activation debugging is on
AAA Authentication debugging is on
AAA Authorization debugging is on
PPP:
PPP protocol negotiation debugging is on
Chat Scripts:
Chat scripts activity debugging is on
Callback:
Callback activity debugging is on
Radius protocol debugging is on
rtpkrb#
04:04:42: TTY1: DSR came up
04:04:42: tty1: Modem: IDLE->READY
04:04:42: TTY1: Autoselect started
04:04:44: TTY1: Autoselect sample 7E
04:04:44: TTY1: Autoselect sample 7EFF
04:04:44: TTY1: Autoselect sample 7EFF7D
04:04:44: TTY1: Autoselect sample 7EFF7D23
04:04:44: TTY1 Autoselect cmd: ppp negotiate
04:04:44: TTY1: EXEC creation
04:04:46: %LINK-3-UPDOWN: Interface Async1, changed state to up
04:04:46: As1 PPP: Treating connection as a dedicated line
04:04:46: As1 PPP: Phase is ESTABLISHING, Active Open
04:04:46: As1 LCP: O CONFREQ [Closed] id 224 len 24
04:04:46: As1 LCP: ACCM 0x000A0000 (0x0206000A0000)
04:04:46: As1 LCP: AuthProto PAP (0x0304C023)
04:04:46: As1 LCP: MagicNumber 0xE0FE5C09 (0x0506E0FE5C09)
04:04:46: As1 LCP: PFC (0x0702)
04:04:46: As1 LCP: ACFC (0x0802)
04:04:46: As1 LCP: I CONFACK [REQsent] id 224 len 24
04:04:46: As1 LCP: ACCM 0x000A0000 (0x0206000A0000)
04:04:46: As1 LCP: AuthProto PAP (0x0304C023)
04:04:46: As1 LCP: MagicNumber 0xE0FE5C09 (0x0506E0FE5C09)
04:04:46: As1 LCP: PFC (0x0702)
04:04:46: As1 LCP: ACFC (0x0802)
04:04:47: As1 LCP: I CONFREQ [ACKrcvd] id 0 len 23
04:04:47: As1 LCP: ACCM 0x00000000 (0x020600000000)
04:04:47: As1 LCP: MagicNumber 0x00006CCD (0x050600006CCD)
04:04:47: As1 LCP: PFC (0x0702)
04:04:47: As1 LCP: ACFC (0x0802)
04:04:47: As1 LCP: Callback 6 (0x0D0306)
04:04:47: As1 LCP: O CONFACK [ACKrcvd] id 0 len 23
04:04:47: As1 LCP: ACCM 0x00000000 (0x020600000000)
04:04:47: As1 LCP: MagicNumber 0x00006CCD (0x050600006CCD)
04:04:47: As1 LCP: PFC (0x0702)
04:04:47: As1 LCP: ACFC (0x0802)
04:04:47: As1 LCP: Callback 6 (0x0D0306)
04:04:47: As1 LCP: State is Open
04:04:47: As1 PPP: Phase is AUTHENTICATING, by this end
04:04:47: As1 LCP: I IDENTIFY [Open] id 1 len 18 magic
0x00006CCD MSRASV4.00
04:04:47: As1 LCP: I IDENTIFY [Open] id 2 len 21 magic
0x00006CCD MSRAS-1-ZEKIE

```

04:04:47: As1 PAP: I AUTH-REQ id 15 len 24 from "callback2"  
04:04:47: As1 PAP: Authenticating peer callback2  
04:04:47: AAA/AUTHEN: create\_user (0x14B1CC) user='callback2' ruser=''  
port='Async1' rem\_addr='async' authen\_type=PAP service=PPP priv=1  
04:04:47: AAA/AUTHEN/START (3229557248): port='Async1' list=''  
action=LOGIN service=PPP  
04:04:47: AAA/AUTHEN/START (3229557248): using "default" list  
04:04:47: AAA/AUTHEN/START (3229557248): Method=RADIUS  
04:04:47: RADIUS: Computed extended port value 0:1:  
04:04:47: RADIUS: Initial Transmit id 156 171.68.118.101:1645,  
Access-Request, len 79  
04:04:47: Attribute 4 6 0A1F0105  
04:04:47: Attribute 5 6 00000001  
04:04:47: Attribute 61 6 00000000  
04:04:47: Attribute 1 11 63616C6C  
04:04:47: Attribute 2 18 47E86FBC  
04:04:47: Attribute 6 6 00000002  
04:04:47: Attribute 7 6 00000001  
04:04:47: RADIUS: Received from id 156 171.68.118.101:1645,  
Access-Accept, len 69  
04:04:47: Attribute 6 6 00000002  
04:04:47: Attribute 7 6 00000001  
04:04:47: Attribute 26 37 00000009011F6C63  
04:04:47: RADIUS: saved authorization data for user 14B1CC at 14A684  
04:04:47: AAA/AUTHEN (3229557248): status = PASS  
04:04:47: AAA/AUTHOR/LCP As1: Authorize LCP  
04:04:47: AAA/AUTHOR/LCP As1 (101984404): Port='Async1'  
list='' service=NET  
04:04:47: AAA/AUTHOR/LCP: As1 (101984404) user='callback2'  
04:04:47: AAA/AUTHOR/LCP: As1 (101984404) send AV service=ppp  
04:04:47: AAA/AUTHOR/LCP: As1 (101984404) send AV protocol=lcp  
04:04:47: AAA/AUTHOR/LCP (101984404) found list "default"  
04:04:47: AAA/AUTHOR/LCP: As1 (101984404) Method=RADIUS  
*!--- Callback number is obtained from the RADIUS server.* 04:04:47: RADIUS: cisco AVPair  
"lcp:callback-dialstring=20367" 04:04:47: AAA/AUTHOR (101984404): Post authorization status =  
PASS\_REPL 04:04:47: AAA/AUTHOR/LCP As1: Processing AV service=ppp 04:04:47: AAA/AUTHOR/LCP As1:  
Processing AV callback-dialstring=20367 04:04:47: As1 PAP: O AUTH-ACK id 15 len 5 04:04:47: As1  
MCB: User callback2 Callback Number - Server 20367 04:04:47: Async1 PPP: O MCB Request(1) id 47  
len 7 04:04:47: Async1 MCB: O 1 2F 0 7 3 3 0 04:04:47: As1 MCB: O Request Id 47 Callback Type  
Server-Num delay 0 04:04:47: Async1 PPP: I MCB Response(2) id 47 len 7 04:04:47: Async1 MCB: I 2  
2F 0 7 3 3 C 04:04:47: As1 MCB: Received response 04:04:47: As1 MCB: Response CBK-Server-Num 3 3  
12 04:04:47: Async1 PPP: O MCB Ack(3) id 48 len 7 04:04:47: Async1 MCB: O 3 30 0 7 3 3 C  
04:04:47: As1 MCB: O Ack Id 48 Callback Type Server-Num delay 12 04:04:47: As1 MCB: Negotiated  
MCB with peer 04:04:47: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state to  
up 04:04:47: As1 LCP: I TERMREQ [Open] id 3 len 8 (0x00000000) 04:04:47: As1 LCP: O TERMACK  
[Open] id 3 len 4 04:04:47: As1 MCB: Peer terminating the link 04:04:47: As1 PPP: Phase is  
TERMINATING 04:04:47: As1 MCB: Link terminated by peer, Callback Needed *!--- Callback is  
initiated.* 04:04:47: As1 MCB: Initiate Callback for callback2 at 20367 using Async 04:04:47: As1  
MCB: Async-callback in progress 04:04:47: TTY1 Callback PPP process creation 04:04:47: As1  
AAA/ACCT: Using PPP accounting list "" 04:04:47: TTY1 Callback process initiated, user:  
dialstring 20367 04:04:48: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state  
to down 04:04:48: TTY1: Async Int reset: Dropping DTR 04:04:49: As1 LCP: TIMEOUT: Time 0xE02574  
State TERMsent 04:04:49: As1 LCP: State is Closed 04:04:49: As1 PPP: Phase is DOWN 04:04:49: As1  
PPP: Phase is ESTABLISHING, Passive Open 04:04:49: As1 LCP: State is Listen 04:04:50: %LINK-5-  
CHANGED: Interface Async1, changed state to reset 04:04:50: As1 LCP: State is Closed 04:04:50:  
As1 PPP: Phase is DOWN 04:04:50: As1 IPCP: Remove route to 15.15.15.15 04:04:53: AAA/AUTHEN:  
free\_user (0x14B1CC) user='callback2' ruser='' port='Async1' rem\_addr='async' authen\_type=PAP  
service=PPP priv=1 04:04:53: TTY1 Callback forced wait = 4 seconds 04:04:55: %LINK-3-UPDOWN:  
Interface Async1, changed state to down 04:04:55: As1 LCP: State is Closed 04:04:55: As1 PPP:  
Phase is DOWN 04:04:57: CHAT1: Matched chat script offhook to string offhook 04:04:57: CHAT1:  
Asserting DTR 04:04:57: CHAT1: Chat script offhook started 04:04:57: CHAT1: Sending string: ATH1  
04:04:57: CHAT1: Expecting string: OK 04:04:57: CHAT1: Completed match for expect: OK 04:04:57:  
CHAT1: Chat script offhook finished, status = Success 04:04:57: CHAT1: Matched chat script  
callback to string callback 04:04:57: CHAT1: Asserting DTR 04:04:57: CHAT1: Chat script callback

started 04:04:57: CHAT1: Sending string: ATZ 04:04:57: CHAT1: Expecting string: OK 04:04:57:  
CHAT1: Completed match for expect: OK 04:04:57: CHAT1: Sending string: ATDT \T<20367> 04:04:57:  
CHAT1: Expecting string: CONNECT 04:05:14: CHAT1: Completed match for expect: CONNECT 04:05:14:  
CHAT1: Sending string: \c 04:05:14: CHAT1: Chat script callback finished, status = Success  
04:05:14: TTY1 PPP Callback Successful - await exec/autoselect pickup 04:05:16: TTY1: DSR came  
up 04:05:16: TTY1: Callback in effect 04:05:16: tty1: Modem: IDLE->READY 04:05:16: TTY1:  
Autoselect started 04:05:16: As1 LCP: I CONFREQ [Closed] id 0 len 20 04:05:16: As1 LCP: ACCM  
0x00000000 (0x020600000000) 04:05:16: As1 LCP: MagicNumber 0x000007A0 (0x0506000007A0) 04:05:16:  
As1 LCP: PFC (0x0702) 04:05:16: As1 LCP: ACFC (0x0802) 04:05:16: As1 LCP: Lower layer not up,  
discarding packet 04:05:18: %LINK-3-UPDOWN: Interface Async1, changed state to up 04:05:18: As1  
PPP: Treating connection as a dedicated line 04:05:18: As1 PPP: Phase is ESTABLISHING, Active  
Open 04:05:18: As1 LCP: O CONFREQ [Closed] id 225 len 24 04:05:18: As1 LCP: ACCM 0x000A0000  
(0x0206000A0000) 04:05:18: As1 LCP: AuthProto PAP (0x0304C023) 04:05:18: As1 LCP: MagicNumber  
0xE0FED8A0 (0x0506E0FED8A0) 04:05:18: As1 LCP: PFC (0x0702) 04:05:18: As1 LCP: ACFC (0x0802)  
04:05:18: As1 LCP: I CONFACK [REQsent] id 225 len 24 04:05:18: As1 LCP: ACCM 0x000A0000  
(0x0206000A0000) 04:05:18: As1 LCP: AuthProto PAP (0x0304C023) 04:05:18: As1 LCP: MagicNumber  
0xE0FED8A0 (0x0506E0FED8A0) 04:05:18: As1 LCP: PFC (0x0702) 04:05:18: As1 LCP: ACFC (0x0802)  
04:05:19: As1 LCP: I CONFREQ [ACKrcvd] id 0 len 20 04:05:19: As1 LCP: ACCM 0x00000000  
(0x020600000000) 04:05:19: As1 LCP: MagicNumber 0x000007A0 (0x0506000007A0) 04:05:19: As1 LCP:  
PFC (0x0702) 04:05:19: As1 LCP: ACFC (0x0802) 04:05:19: As1 LCP: O CONFACK [ACKrcvd] id 0 len 20  
04:05:19: As1 LCP: ACCM 0x00000000 (0x020600000000) 04:05:19: As1 LCP: MagicNumber 0x000007A0  
(0x0506000007A0) 04:05:19: As1 LCP: PFC (0x0702) 04:05:19: As1 LCP: ACFC (0x0802) 04:05:19: As1  
LCP: State is Open 04:05:19: As1 PPP: Phase is AUTHENTICATING, by this end 04:05:19: As1 LCP: I  
IDENTIFY [Open] id 1 len 18 magic 0x000007A0 MSRASV4.00 04:05:19: As1 LCP: I IDENTIFY [Open] id  
2 len 21 magic 0x000007A0 MSRAS-1-ZEKIE 04:05:19: As1 PAP: I AUTH-REQ id 16 len 24 from  
"callback2" 04:05:19: As1 PAP: Authenticating peer callback2 04:05:19: AAA/AUTHEN: create\_user  
(0x14A640) user='callback2' ruser='' port='Async1' rem\_addr='async' authen\_type=PAP service=PPP  
priv=1 04:05:19: AAA/AUTHEN/START (1256800753): port='Async1' list='' action=LOGIN service=PPP  
04:05:19: AAA/AUTHEN/START (1256800753): using "default" list 04:05:19: AAA/AUTHEN/START  
(1256800753): Method=RADIUS 04:05:19: RADIUS: Computed extended port value 0:1: 04:05:19:  
RADIUS: Initial Transmit id 157 171.68.118.101:1645, Access-Request, len 79 04:05:19: Attribute  
4 6 0A1F0105 04:05:19: Attribute 5 6 00000001 04:05:19: Attribute 61 6 00000000 04:05:19:  
Attribute 1 11 63616C6C 04:05:19: Attribute 2 18 C29C6276 04:05:19: Attribute 6 6 00000002  
04:05:19: Attribute 7 6 00000001 04:05:19: RADIUS: Received from id 157 171.68.118.101:1645,  
Access-Accept, len 69 04:05:19: Attribute 6 6 00000002 04:05:19: Attribute 7 6 00000001  
04:05:19: Attribute 26 37 00000009011F6C63 04:05:19: RADIUS: saved authorization data for user  
14A640 at 14B1CC 04:05:19: AAA/AUTHEN (1256800753): status = PASS 04:05:19: AAA/AUTHOR/LCP As1:  
Authorize LCP 04:05:19: AAA/AUTHOR/LCP As1 (1783017574): Port='Async1' list='' service=NET  
04:05:19: AAA/AUTHOR/LCP: As1 (1783017574) user='callback2' 04:05:19: AAA/AUTHOR/LCP: As1  
(1783017574) send AV service=ppp 04:05:19: AAA/AUTHOR/LCP: As1 (1783017574) send AV protocol=lcp  
04:05:19: AAA/AUTHOR/LCP (1783017574) found list "default" 04:05:19: AAA/AUTHOR/LCP: As1  
(1783017574) Method=RADIUS 04:05:19: RADIUS: cisco AVPair "lcp:callback-dialstring=20367"  
04:05:19: AAA/AUTHOR (1783017574): Post authorization status = PASS\_REPL 04:05:19:  
AAA/AUTHOR/LCP As1: Processing AV service=ppp 04:05:19: AAA/AUTHOR/LCP As1: Processing AV  
callback-dialstring=20367 04:05:19: As1 PAP: O AUTH-ACK id 16 len 5 04:05:19: As1 PPP: Phase is  
UP 04:05:19: AAA/AUTHOR/FSM As1: (0): Can we start IPCP? 04:05:19: AAA/AUTHOR/FSM As1  
(1621572650): Port='Async1' list='' service=NET 04:05:19: AAA/AUTHOR/FSM: As1 (1621572650)  
user='callback2' 04:05:19: AAA/AUTHOR/FSM: As1 (1621572650) send AV service=ppp 04:05:19:  
AAA/AUTHOR/FSM: As1 (1621572650) send AV protocol=ip 04:05:19: AAA/AUTHOR/FSM (1621572650) found  
list "default" 04:05:19: AAA/AUTHOR/FSM: As1 (1621572650) Method=RADIUS 04:05:19: RADIUS: cisco  
AVPair "lcp:callback-dialstring=20367" not applied for ip 04:05:19: AAA/AUTHOR (1621572650):  
Post authorization status = PASS\_REPL 04:05:19: AAA/AUTHOR/FSM As1: We can start IPCP 04:05:19:  
As1 IPCP: O CONFREQ [Closed] id 24 len 10 04:05:19: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105)  
04:05:19: As1 IPCP: I CONFREQ [REQsent] id 3 len 40 04:05:19: As1 IPCP: CompressType VJ 15 slots  
CompressSlotID (0x0206002D0F01) 04:05:19: As1 IPCP: Address 0.0.0.0 (0x030600000000) 04:05:19:  
As1 IPCP: PrimaryDNS 0.0.0.0 (0x810600000000) 04:05:19: As1 IPCP: PrimaryWINS 0.0.0.0  
(0x820600000000) 04:05:19: As1 IPCP: SecondaryDNS 0.0.0.0 (0x830600000000) 04:05:19: As1 IPCP:  
SecondaryWINS 0.0.0.0 (0x840600000000) 04:05:19: AAA/AUTHOR/IPCP As1: Start. Her address  
0.0.0.0, we want 0.0.0.0 04:05:19: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 04:05:19:  
AAA/AUTHOR/IPCP As1: Authorization succeeded 04:05:19: AAA/AUTHOR/IPCP As1: Done. Her address  
0.0.0.0, we want 0.0.0.0 04:05:19: As1 IPCP: Using pool 'async' 04:05:19: As1 IPCP: Pool  
returned 15.15.15.15 04:05:19: As1 IPCP: O CONFREQ [REQsent] id 3 len 28 04:05:19: As1 IPCP:  
CompressType VJ 15 slots CompressSlotID (0x0206002D0F01) 04:05:19: As1 IPCP: PrimaryWINS 0.0.0.0  
(0x820600000000) 04:05:19: As1 IPCP: SecondaryDNS 0.0.0.0 (0x830600000000) 04:05:19: As1 IPCP:



```
SecondaryWINS 0.0.0.0 (0x840600000000) 04:05:19: As1 IPCP: I CONFACK [REQsent] id 24 len 10
04:05:19: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105) 04:05:19: As1 IPCP: I CONFREQ [ACKrcvd]
id 4 len 16 04:05:19: As1 IPCP: Address 0.0.0.0 (0x030600000000) 04:05:19: As1 IPCP: PrimaryDNS
0.0.0.0 (0x810600000000) 04:05:19: AAA/AUTHOR/IPCP As1: Start. Her address 0.0.0.0, we want
15.15.15.15 04:05:19: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 04:05:19: AAA/AUTHOR/IPCP
As1: Authorization succeeded 04:05:19: AAA/AUTHOR/IPCP As1: Done. Her address 0.0.0.0, we want
15.15.15.15 04:05:19: As1 IPCP: O CONFNAK [ACKrcvd] id 4 len 16 04:05:19: As1 IPCP: Address
15.15.15.15 (0x03060F0F0F0F) 04:05:19: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667)
04:05:20: As1 IPCP: I CONFREQ [ACKrcvd] id 5 len 16 04:05:20: As1 IPCP: Address 15.15.15.15
(0x03060F0F0F0F) 04:05:20: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667) 04:05:20:
AAA/AUTHOR/IPCP As1: Start. Her address 15.15.15.15, we want 15.15.15.15 04:05:20:
AAA/AUTHOR/IPCP As1 (2922034935): Port='Async1' list='' service=NET 04:05:20: AAA/AUTHOR/IPCP:
As1 (2922034935) user='callback2' 04:05:20: AAA/AUTHOR/IPCP: As1 (2922034935) send AV
service=ppp 04:05:20: AAA/AUTHOR/IPCP: As1 (2922034935) send AV protocol=ip 04:05:20:
AAA/AUTHOR/IPCP: As1 (2922034935) send AV addr*15.15.15.15 04:05:20: AAA/AUTHOR/IPCP
(2922034935) found list "default" 04:05:20: AAA/AUTHOR/IPCP: As1 (2922034935) Method=RADIUS
04:05:20: RADIUS: cisco AVPair "lcp:callback-dialstring=20367" not applied for ip 04:05:20:
AAA/AUTHOR (2922034935): Post authorization status = PASS_REPL 04:05:20: AAA/AUTHOR/IPCP As1:
Reject 15.15.15.15, using 15.15.15.15 04:05:20: AAA/AUTHOR/IPCP As1: Processing AV service=ppp
04:05:20: AAA/AUTHOR/IPCP As1: Processing AV addr*15.15.15.15 04:05:20: AAA/AUTHOR/IPCP As1:
Authorization succeeded 04:05:20: AAA/AUTHOR/IPCP As1: Done. Her address 15.15.15.15, we want
15.15.15.15 04:05:20: As1 IPCP: O CONFACK [ACKrcvd] id 5 len 16 04:05:20: As1 IPCP: Address
15.15.15.15 (0x03060F0F0F0F) 04:05:20: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667)
04:05:20: As1 IPCP: State is Open 04:05:20: As1 IPCP: Install route to 15.15.15.15 04:05:20:
%LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state to up
```

## Обратный вызов PPP с использованием определенного пользователем номера

Предыдущие примеры были для обратного вызова при определенном номере (указанном на сервере). Обратный вызов может также быть сделан в заданном пользователями numbe; т.е. номер обратного вызова задан как пустой указатель в сервере проверки подлинности. Это является причиной запроса маршрутизатором обратного номера у пользователя. Начальное тестирование следует проводить, указав локальный обратный вызов. **Если локальный обратный вызов и нулевая строка обратного вызова не работают, (то есть нет команды "aaa new-model"), обратный вызов RADIUS не будет работать!** Чтобы задать нулевую строку обратного ответа локально на маршрутизаторе:

```
username callback callback-dialstring "" password 0 callback
```

На ПК в окне Dial-Up-Networking (сервер Windows NT) в разделе User Preferences установите флажок Callback - maybe ask me during redial if server offers. После проверки пользователя на экране PC появляется окно, в котором написано Callback - You have entered "Set by caller" и остальное сообщение, а затем Enter modem phone number (Введите номер телефона модема)."

## Конфигурации сервера

### Настройка сервера CiscoSecure NT

- Для пользователя отображается окно ввода и подтверждения пароля.
- В параметрах группы: атрибут сервис 006 – тип = форматный атрибут 007 форматный протокол = протокол двухточечного соединения
- В последней коробке на экране, Атрибутах сервера RADIUS для Cisco, проверьте [009\001 - пару значение-атрибут] и внизу, войдите: lcp:callback-dialstring =



## Установка сервера CiscoSecure UNIX

```
rtp-berry# ./ViewProfile -p 9900 -u callback
User Profile Information
user = callback{
profile_id = 34
profile_cycle = 1
radius=Cisco {
check_items= {
2="callback"
}
reply_attributes= {
6=2
7=1
9,1="lcp:callback-dialstring="
}
}
}
```

## Настройка сервера. Livingston RADIUS

```
callback2 Password = "callback2"
User-Service-Type = Framed-User,
Framed-Protocol = PPP,
cisco-avpair = "lcp:callback-dialstring="
```

## Пример результата отладки

```
koala#show debug General OS: Modem control/process activation debugging is on AAA Authentication
debugging is on AAA Authorization debugging is on Dial on demand: Dial on demand events
debugging is on PPP: PPP authentication debugging is on PPP protocol negotiation debugging is on
Chat Scripts: Chat scripts activity debugging is on Callback: Callback activity debugging is on
Radius protocol debugging is on koala# 02:23:01: TTY1: DSR came up 02:23:01: tty1: Modem: IDLE-
>READY 02:23:01: TTY1: Autoselect started 02:23:03: TTY1: Autoselect sample 7E 02:23:03: TTY1:
Autoselect sample 7EFF 02:23:03: TTY1: Autoselect sample 7EFF7D 02:23:03: TTY1: Autoselect
sample 7EFF7D23 02:23:03: TTY1 Autoselect cmd: ppp negotiate 02:23:03: TTY1: EXEC creation
02:23:05: %LINK-3-UPDOWN: Interface Async1, changed state to up 02:23:05: As1 PPP: Treating
connection as a dedicated line 02:23:05: As1 PPP: Phase is ESTABLISHING, Active Open 02:23:05:
As1 LCP: O CONFREQ [Closed] id 27 len 24 02:23:05: As1 LCP: ACCM 0x000A0000 (0x0206000A0000)
02:23:05: As1 LCP: AuthProto PAP (0x0304C023) 02:23:05: As1 LCP: MagicNumber 0xE0A14386
(0x0506E0A14386) 02:23:05: As1 LCP: PFC (0x0702) 02:23:05: As1 LCP: ACFC (0x0802) 02:23:05: As1
LCP: I CONFACK [REQsent] id 27 len 24 02:23:05: As1 LCP: ACCM 0x000A0000 (0x0206000A0000)
02:23:05: As1 LCP: AuthProto PAP (0x0304C023) 02:23:05: As1 LCP: MagicNumber 0xE0A14386
(0x0506E0A14386) 02:23:05: As1 LCP: PFC (0x0702) 02:23:05: As1 LCP: ACFC (0x0802) 02:23:06: As1
LCP: I CONFREQ [ACKrcvd] id 0 len 23 02:23:06: As1 LCP: ACCM 0x00000000 (0x020600000000)
02:23:06: As1 LCP: MagicNumber 0x0000152B (0x05060000152B) 02:23:06: As1 LCP: PFC (0x0702)
02:23:06: As1 LCP: ACFC (0x0802) 02:23:06: As1 LCP: Callback 6 (0x0D0306) 02:23:06: As1 LCP: O
CONFACK [ACKrcvd] id 0 len 23 02:23:06: As1 LCP: ACCM 0x00000000 (0x020600000000) 02:23:06: As1
LCP: MagicNumber 0x0000152B (0x05060000152B) 02:23:06: As1 LCP: PFC (0x0702) 02:23:06: As1 LCP:
ACFC (0x0802) 02:23:06: As1 LCP: Callback 6 (0x0D0306) 02:23:06: As1 LCP: State is Open
02:23:06: As1 PPP: Phase is AUTHENTICATING, by this end 02:23:06: As1 LCP: I IDENTIFY [Open] id
1 len 18 magic 0x0000152B MSRASV4.00 02:23:06: As1 LCP: I IDENTIFY [Open] id 2 len 21 magic
0x0000152B MSRAS-1-ZEKIE 02:23:06: As1 PAP: I AUTH-REQ id 64 len 22 from "userspec" 02:23:06:
As1 PAP: Authenticating peer userspec 02:23:06: AAA/AUTHEN: create_user (0x16E284)
user='userspec' ruser='' port='Async1' rem_addr='async' authen_type=PAP service=PPP priv=1
02:23:06: AAA/AUTHEN/START (835406208): port='Async1' list='' action=LOGIN service=PPP 02:23:06:
AAA/AUTHEN/START (835406208): using "default" list 02:23:06: AAA/AUTHEN (835406208): status =
```

UNKNOWN 02:23:06: AAA/AUTHEN/START (835406208): Method=RADIUS 02:23:06: RADIUS: Computed extended port value 0:1: 02:23:06: RADIUS: Initial Transmit id 25 171.68.120.194:1645, Access-Request, len 78 02:23:06: Attribute 4 6 0A1F0105 02:23:06: Attribute 5 6 00000001 02:23:06: Attribute 61 6 00000000 02:23:06: Attribute 1 10 75736572 02:23:06: Attribute 2 18 E1377DA0 02:23:06: Attribute 6 6 00000002 02:23:06: Attribute 7 6 00000001 02:23:06: RADIUS: Received from id 25 171.68.120.194:1645, Access-Accept, len 64 02:23:06: Attribute 6 6 00000002 02:23:06: Attribute 7 6 00000001 02:23:06: RADIUS: saved authorization data for user 16E284 at A1B44 02:23:06: AAA/AUTHEN (835406208): status = PASS 02:23:06: AAA/AUTHOR/LCP As1: Authorize LCP 02:23:06: AAA/AUTHOR/LCP As1 (2812925385): Port='Async1' list='' service=NET 02:23:06: AAA/AUTHOR/LCP: As1 (2812925385) user='userspec' 02:23:06: AAA/AUTHOR/LCP: As1 (2812925385) send AV service=ppp 02:23:06: AAA/AUTHOR/LCP: As1 (2812925385) send AV protocol=lcp 02:23:06: AAA/AUTHOR/LCP (2812925385) found list "default" 02:23:06: AAA/AUTHOR/LCP: As1 (2812925385) Method=RADIUS *!--- Callback dialstring is empty (null).* 02:23:06: RADIUS: cisco AVPair "lcp:callback-dialstring=" 02:23:06: AAA/AUTHOR (2812925385): Post authorization status = PASS\_REPL 02:23:06: AAA/AUTHOR/LCP As1: Processing AV service=ppp 02:23:06: AAA/AUTHOR/LCP As1: Processing AV callback-dialstring= 02:23:06: As1 PAP: 0 AUTH-ACK id 64 len 5 *!--- Router recognizes that it is to receive number from client !--- and starts sending requests to PC.* 02:23:06: As1 MCB: User userspec Callback Number - Client ANY 02:23:06: Async1 PPP: 0 MCB Request(1) id 92 len 9 02:23:06: Async1 MCB: 0 1 5C 0 9 2 5 0 1 0 02:23:06: As1 MCB: 0 Request Id 92 Callback Type Client-Num delay 0 02:23:07: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state to up *!--- Router receives response from PC.* 02:23:09: Async1 PPP: I MCB Response(2) id 92 len 14 02:23:09: Async1 MCB: I 2 5C 0 E 2 A C 1 32 30 33 36 37 0 02:23:09: As1 MCB: Received response *!--- Received callback number from the client.* 02:23:09: As1 MCB: Response CBK-Client-Num 2 10 12, addr 1-20367 02:23:09: Async1 PPP: 0 MCB Ack(3) id 93 len 14 02:23:09: Async1 MCB: 0 3 5D 0 E 2 A C 1 32 30 33 36 37 0 02:23:09: As1 MCB: 0 Ack Id 93 Callback Type Client-Num delay 12 02:23:09: As1 MCB: Negotiated MCB with peer 02:23:09: As1 LCP: I TERMREQ [Open] id 3 len 8 (0x00000000) 02:23:09: As1 LCP: 0 TERMACK [Open] id 3 len 4 02:23:09: As1 MCB: Peer terminating the link 02:23:09: As1 PPP: Phase is TERMINATING 02:23:09: As1 MCB: Link terminated by peer, Callback Needed *!--- Callback is initiated.* 02:23:09: As1 MCB: Initiate Callback for userspec at 20367 using Async 02:23:09: TTY1 Callback user dialstring 20367 from PPP negotiation 02:23:09: As1 MCB: Async-callback in progress 02:23:09: TTY1 Callback PPP process creation 02:23:09: As1 AAA/ACCT: Using PPP accounting list "" 02:23:09: TTY1 Callback process initiated, user: dialstring 20367 02:23:09: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state to down 02:23:10: TTY1: Async Int reset: Dropping DTR 02:23:11: As1 LCP: TIMEOUT: Time 0x831824 State TERMSent 02:23:11: As1 LCP: State is Closed 02:23:11: As1 PPP: Phase is DOWN 02:23:11: As1 VP: Cleaning already proceeding 02:23:11: As1 PPP: Phase is ESTABLISHING, Passive Open 02:23:11: AAA/AUTHEN: dup\_user (0x16E558) user='userspec' ruser='' port='Async1' rem\_addr='async' authen\_type=PAP service=PPP priv=1 source='AAA dup lcp\_reset' 02:23:11: AAA/AUTHEN: Method=IF-NEEDED: no authentication needed. user='userspec' port='Async1' rem\_addr='async' 02:23:11: As1 LCP: State is Listen 02:23:11: AAA/AUTHEN: free\_user (0x16E284) user='userspec' ruser='' port='Async1' rem\_addr='async' authen\_type=PAP service=PPP priv=1 02:23:12: %LINK-5-CHANGED: Interface Async1, changed state to reset 02:23:12: As1 LCP: State is Closed 02:23:12: As1 PPP: Phase is DOWN 02:23:12: As1 VP: Cleaning already proceeding 02:23:12: As1 IPCP: Remove route to 15.15.15.15 02:23:15: AAA/AUTHEN: free\_user (0x16E558) user='userspec' ruser='' port='Async1' rem\_addr='async' authen\_type=PAP service=PPP priv=1 02:23:15: TTY1 Callback forced wait = 4 seconds 02:23:17: %LINK-3-UPDOWN: Interface Async1, changed state to down 02:23:17: As1 LCP: State is Closed 02:23:17: As1 PPP: Phase is DOWN 02:23:17: As1 VP: Cleaning already proceeding 02:23:19: CHAT1: Matched chat script offhook to string offhook 02:23:19: CHAT1: Asserting DTR 02:23:19: CHAT1: Chat script offhook started 02:23:19: CHAT1: Sending string: ATH1 02:23:19: CHAT1: Expecting string: OK 02:23:19: CHAT1: Completed match for expect: OK 02:23:19: CHAT1: Chat script offhook finished, status = Success 02:23:19: CHAT1: Matched chat script callback to string callback 02:23:19: CHAT1: Asserting DTR 02:23:19: CHAT1: Chat script callback started 02:23:19: CHAT1: Sending string: ATZ 02:23:19: CHAT1: Expecting string: OK 02:23:19: CHAT1: Completed match for expect: OK 02:23:19: CHAT1: Sending string: ATDT \T<20367> 02:23:19: CHAT1: Expecting string: CONNECT 02:23:35: CHAT1: Completed match for expect: CONNECT 02:23:35: CHAT1: Sending string: \c 02:23:35: CHAT1: Chat script callback finished, status = Success 02:23:35: TTY1 PPP Callback Successful - await exec/autoselect pickup 02:23:37: TTY1: DSR came up 02:23:37: TTY1: Callback in effect 02:23:37: tty1: Modem: IDLE->READY 02:23:37: TTY1: Autoselect started 02:23:37: As1 LCP: I CONFREQ [Closed] id 0 len 20 02:23:37: As1 LCP: ACCM 0x00000000 (0x020600000000) 02:23:37: As1 LCP: MagicNumber 0x00005156 (0x050600005156) 02:23:37: As1 LCP: PFC (0x0702) 02:23:37: As1 LCP: ACFC (0x0802) 02:23:37: As1 LCP: Lower layer not up, discarding packet 02:23:39: %LINK-3-UPDOWN: Interface Async1, changed state to up 02:23:39: As1 PPP: Treating connection as a dedicated line 02:23:39: As1 PPP: Phase is ESTABLISHING, Active Open

02:23:39: As1 LCP: O CONFREQ [Closed] id 28 len 24 02:23:39: As1 LCP: ACCM 0x000A0000  
(0x0206000A0000) 02:23:39: As1 LCP: AuthProto PAP (0x0304C023) 02:23:39: As1 LCP: MagicNumber  
0xE0A1CAB2 (0x0506E0A1CAB2) 02:23:39: As1 LCP: PFC (0x0702) 02:23:39: As1 LCP: ACFC (0x0802)  
02:23:40: As1 LCP: I CONFACK [REQsent] id 28 len 24 02:23:40: As1 LCP: ACCM 0x000A0000  
(0x0206000A0000) 02:23:40: As1 LCP: AuthProto PAP (0x0304C023) 02:23:40: As1 LCP: MagicNumber  
0xE0A1CAB2 (0x0506E0A1CAB2) 02:23:40: As1 LCP: PFC (0x0702) 02:23:40: As1 LCP: ACFC (0x0802)  
02:23:40: As1 LCP: I CONFREQ [ACKrcvd] id 0 len 20 02:23:40: As1 LCP: ACCM 0x00000000  
(0x020600000000) 02:23:40: As1 LCP: MagicNumber 0x00005156 (0x050600005156) 02:23:40: As1 LCP:  
PFC (0x0702) 02:23:40: As1 LCP: ACFC (0x0802) 02:23:40: As1 LCP: O CONFACK [ACKrcvd] id 0 len 20  
02:23:40: As1 LCP: ACCM 0x00000000 (0x020600000000) 02:23:40: As1 LCP: MagicNumber 0x00005156  
(0x050600005156) 02:23:40: As1 LCP: PFC (0x0702) 02:23:40: As1 LCP: ACFC (0x0802) 02:23:40: As1  
LCP: State is Open 02:23:40: As1 PPP: Phase is AUTHENTICATING, by this end 02:23:41: As1 LCP: I  
IDENTIFY [Open] id 1 len 18 magic 0x00005156 MSRASV4.00 02:23:41: As1 LCP: I IDENTIFY [Open] id  
2 len 21 magic 0x00005156 MSRAS-1-ZEKIE 02:23:41: As1 PAP: I AUTH-REQ id 65 len 22 from  
"userspec" 02:23:41: As1 PAP: Authenticating peer userspec 02:23:41: AAA/AUTHEN: create\_user  
(0x16E284) user='userspec' ruser='' port='Async1' rem\_addr='async' authen\_type=PAP service=PPP  
priv=1 02:23:41: AAA/AUTHEN/START (2883652190): port='Async1' list='' action=LOGIN service=PPP  
02:23:41: AAA/AUTHEN/START (2883652190): using "default" list 02:23:41: AAA/AUTHEN (2883652190):  
status = UNKNOWN 02:23:41: AAA/AUTHEN/START (2883652190): Method=RADIUS 02:23:41: RADIUS:  
Computed extended port value 0:1: 02:23:41: RADIUS: Initial Transmit id 26 171.68.120.194:1645,  
Access-Request, len 78 02:23:41: Attribute 4 6 0A1F0105 02:23:41: Attribute 5 6 00000001  
02:23:41: Attribute 61 6 00000000 02:23:41: Attribute 1 10 75736572 02:23:41: Attribute 2 18  
8150DA02 02:23:41: Attribute 6 6 00000002 02:23:41: Attribute 7 6 00000001 02:23:41: RADIUS:  
Received from id 26 171.68.120.194:1645, Access-Accept, len 64 02:23:41: Attribute 6 6 00000002  
02:23:41: Attribute 7 6 00000001 02:23:41: Attribute 26 32 00000009011A6C63 02:23:41: RADIUS:  
saved authorization data for user 16E284 at A1B44 02:23:41: AAA/AUTHEN (2883652190): status =  
PASS 02:23:41: AAA/AUTHOR/LCP As1: Authorize LCP 02:23:41: AAA/AUTHOR/LCP As1 (3660077691):  
Port='Async1' list='' service=NET 02:23:41: AAA/AUTHOR/LCP: As1 (3660077691) user='userspec'  
02:23:41: AAA/AUTHOR/LCP: As1 (3660077691) send AV service=ppp 02:23:41: AAA/AUTHOR/LCP: As1  
(3660077691) send AV protocol=lcp 02:23:41: AAA/AUTHOR/LCP (3660077691) found list "default"  
02:23:41: AAA/AUTHOR/LCP: As1 (3660077691) Method=RADIUS 02:23:41: RADIUS: cisco AVPair  
"lcp:callback-dialstring=" 02:23:41: AAA/AUTHOR (3660077691): Post authorization status =  
PASS\_REPL 02:23:41: AAA/AUTHOR/LCP As1: Processing AV service=ppp 02:23:41: AAA/AUTHOR/LCP As1:  
Processing AV callback-dialstring= 02:23:41: As1 PAP: O AUTH-ACK id 65 len 5 02:23:41: As1 PPP:  
Phase is UP 02:23:41: AAA/AUTHOR/FSM As1: (0): Can we start IPCP? 02:23:41: AAA/AUTHOR/FSM As1  
(2418882911): Port='Async1' list='' service=NET 02:23:41: AAA/AUTHOR/FSM: As1 (2418882911)  
user='userspec' 02:23:41: AAA/AUTHOR/FSM: As1 (2418882911) send AV service=ppp 02:23:41:  
AAA/AUTHOR/FSM: As1 (2418882911) send AV protocol=ip 02:23:41: AAA/AUTHOR/FSM (2418882911) found  
list "default" 02:23:41: AAA/AUTHOR/FSM: As1 (2418882911) Method=RADIUS 02:23:41: RADIUS: cisco  
AVPair "lcp:callback-dialstring=" not applied for ip 02:23:41: AAA/AUTHOR (2418882911): Post  
authorization status = PASS\_REPL 02:23:41: AAA/AUTHOR/FSM As1: We can start IPCP 02:23:41: As1  
IPCP: O CONFREQ [Closed] id 12 len 10 02:23:41: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105)  
02:23:41: As1 IPCP: I CONFREQ [REQsent] id 3 len 40 02:23:41: As1 IPCP: CompressType VJ 15 slots  
CompressSlotID (0x0206002D0F01) 02:23:41: As1 IPCP: Address 0.0.0.0 (0x030600000000) 02:23:41:  
As1 IPCP: PrimaryDNS 0.0.0.0 (0x810600000000) 02:23:41: As1 IPCP: PrimaryWINS 0.0.0.0  
(0x820600000000) 02:23:41: As1 IPCP: SecondaryDNS 0.0.0.0 (0x830600000000) 02:23:41: As1 IPCP:  
SecondaryWINS 0.0.0.0 (0x840600000000) 02:23:41: AAA/AUTHOR/IPCP As1: Start. Her address  
0.0.0.0, we want 0.0.0.0 02:23:41: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 02:23:41:  
AAA/AUTHOR/IPCP As1: Authorization succeeded 02:23:41: AAA/AUTHOR/IPCP As1: Done. Her address  
0.0.0.0, we want 0.0.0.0 02:23:41: As1 IPCP: Using pool 'async' 02:23:41: As1 IPCP: Pool  
returned 15.15.15.15 02:23:41: As1 IPCP: O CONFREQ [REQsent] id 3 len 28 02:23:41: As1 IPCP:  
CompressType VJ 15 slots CompressSlotID (0x0206002D0F01) 02:23:41: As1 IPCP: PrimaryWINS 0.0.0.0  
(0x820600000000) 02:23:41: As1 IPCP: SecondaryDNS 0.0.0.0 (0x830600000000) 02:23:41: As1 IPCP:  
SecondaryWINS 0.0.0.0 (0x840600000000) 02:23:41: As1 IPCP: I CONFACK [REQsent] id 12 len 10  
02:23:41: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105) 02:23:41: As1 IPCP: I CONFREQ [ACKrcvd]  
id 4 len 16 02:23:41: As1 IPCP: Address 0.0.0.0 (0x030600000000) 02:23:41: As1 IPCP: PrimaryDNS  
0.0.0.0 (0x810600000000) 02:23:41: AAA/AUTHOR/IPCP As1: Start. Her address 0.0.0.0, we want  
15.15.15.15 02:23:41: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 02:23:41: AAA/AUTHOR/IPCP  
As1: Authorization succeeded 02:23:41: AAA/AUTHOR/IPCP As1: Done. Her address 0.0.0.0, we want  
15.15.15.15 02:23:41: As1 IPCP: O CONFNAK [ACKrcvd] id 4 len 16 02:23:41: As1 IPCP: Address  
15.15.15.15 (0x03060F0F0F0F) 02:23:41: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667)  
02:23:41: As1 IPCP: I CONFREQ [ACKrcvd] id 5 len 16 02:23:41: As1 IPCP: Address 15.15.15.15  
(0x03060F0F0F0F) 02:23:41: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667) 02:23:41:  
AAA/AUTHOR/IPCP As1: Start. Her address 15.15.15.15, we want 15.15.15.15 02:23:41:

```
AAA/AUTHOR/IPCP As1 (2792483333): Port='Async1' list='' service=NET 02:23:41: AAA/AUTHOR/IPCP:
As1 (2792483333) user='userspec' 02:23:41: AAA/AUTHOR/IPCP: As1 (2792483333) send AV service=ppp
02:23:41: AAA/AUTHOR/IPCP: As1 (2792483333) send AV protocol=ip 02:23:41: AAA/AUTHOR/IPCP: As1
(2792483333) send AV addr*15.15.15.15 02:23:41: AAA/AUTHOR/IPCP (2792483333) found list
"default" 02:23:41: AAA/AUTHOR/IPCP: As1 (2792483333) Method=RADIUS 02:23:41: RADIUS: cisco
AVPair "lcp:callback-dialstring=" not applied for ip 02:23:41: AAA/AUTHOR (2792483333): Post
authorization status = PASS_REPL 02:23:41: AAA/AUTHOR/IPCP As1: Reject 15.15.15.15, using
15.15.15.15 02:23:41: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 02:23:41: AAA/AUTHOR/IPCP
As1: Processing AV addr*15.15.15.15 02:23:41: AAA/AUTHOR/IPCP As1: Authorization succeeded
02:23:41: AAA/AUTHOR/IPCP As1: Done. Her address 15.15.15.15, we want 15.15.15.15 02:23:41: As1
IPCP: O CONFACK [ACKrcvd] id 5 len 16 02:23:41: As1 IPCP: Address 15.15.15.15 (0x03060F0F0F0F)
02:23:41: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667) 02:23:41: As1 IPCP: State is Open
02:23:41: dialer Protocol up for As1 02:23:41: As1 IPCP: Install route to 15.15.15.15 02:23:42:
%LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state to up
```

## [Дополнительные сведения](#)

- [Страница поддержки RADIUS](#)
- [Страница поддержки Cisco Secure ACS для Windows](#)
- [Страница поддержки Cisco Secure ACS для UNIX](#)
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