

# Configuration de la fonction PPP Callback sur RNIS avec une chaîne de rappel fournie AAA

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## [Introduction](#)

Ce document fournit un exemple de configuration pour le rappel PPP entre deux routeurs Cisco.

## [Conditions préalables](#)

### [Conditions requises](#)

Aucune spécification déterminée n'est requise pour ce document.

### [Components Used](#)

Les informations contenues dans ce document sont basées sur les versions de matériel et de logiciel suivantes :

- Logiciel Cisco IOS® Version 12.0(3)T ou ultérieure.

**Remarque :** Pour configurer le rappel PPP à l'aide d'une chaîne de rappel attribuée à un serveur AAA, vous devez utiliser la commande `dialer aaa`, disponible dans le logiciel Cisco IOS Version 12.0(3)T ou ultérieure. Cependant, dans les versions 12.1(4)T, 12.2(1)T et ultérieures de Cisco IOS, cette commande n'est pas requise pour le rappel PPP avec une chaîne de rappel attribuée à un serveur AAA.

**Remarque :** La commande **dialer aaa** est uniquement prise en charge avec le DDR hérité (comme illustré dans la [figure1](#)).

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

## [Conventions](#)

Pour plus d'informations sur les conventions des documents, référez-vous aux [Conventions utilisées pour les conseils techniques de Cisco](#).

## [Informations générales](#)

TACACS+ (serveur AAA) est utilisé pour fournir la chaîne de numérotation de rappel au serveur de rappel. Cependant, vous pouvez également utiliser RADIUS pour fournir la chaîne de rappel. Pour configurer le rappel PPP avec authentification, autorisation et comptabilité locales (AAA), reportez-vous à [Configuration du rappel PPP sur RNIS](#).

Dans cet exemple de configuration, le rappel utilise le protocole PPP et les fonctionnalités spécifiées dans la RFC 1570. Le rappel PPP sur le circuit RNIS est effectué dans l'ordre suivant :

1. Le client de rappel initie et active une connexion RNIS au routeur du serveur de rappel.
2. Le client de rappel et le serveur de rappel négocient le protocole LCP (PPP Link Control Protocol). Dans la négociation LCP, le rappel est demandé, négocié et convenu.
3. Le client de rappel et le serveur de rappel s'authentifient mutuellement avec le protocole PAP (PPP Password Authentication Protocol) ou le protocole CHAP (Challenge Handshake Authentication Protocol). Cependant, vous pouvez configurer le client de rappel pour ne pas authentifier le serveur de rappel, via la commande [ppp authentication chap callin](#).
4. Le serveur de rappel obtient les attributs de rappel nécessaires, tels que la chaîne de numérotation de rappel (le numéro de téléphone du client) à partir du serveur AAA.
5. Les deux routeurs abandonnent la connexion RNIS.
6. Le serveur de rappel initie le rappel au client. Lorsque l'appel se connecte, les routeurs s'authentifient mutuellement et la liaison est établie.

## [Configuration](#)

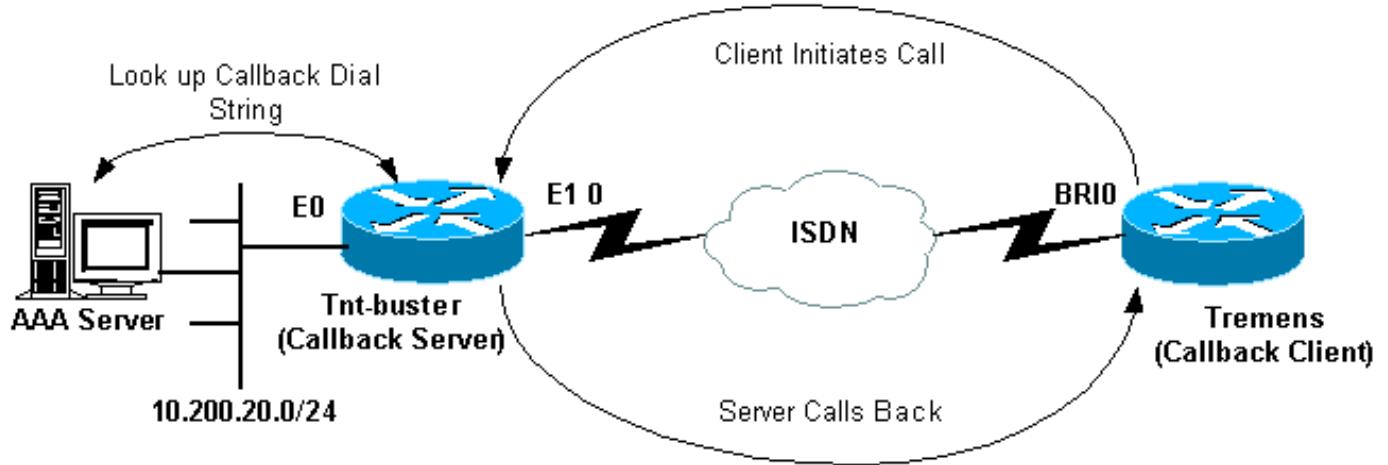
Cette section vous fournit des informations pour configurer les fonctionnalités décrites dans ce document.

**Remarque :** Pour en savoir plus sur les commandes utilisées dans le présent document, utilisez [l'outil de recherche de commandes](#) (clients [inscrits](#) seulement).

## [Diagramme du réseau](#)

Ce document utilise la configuration réseau suivante :

**Figure 1 - Diagramme de réseau**



## Configurations

Ce document utilise les configurations suivantes :

- Configuration de freeware TACACS+
- Configuration RADIUS
- Configuration RADIUS alternative
- Configuration de Tnt-buster (serveur de rappel)
- Configuration de Tremens (client de rappel)

### Configuration de freeware TACACS+

```
user = tremens {
    default service = permit
    login = cleartext "cisco"
    chap = cleartext "cisco"
    !--- CHAP password. service = ppp protocol = lcp {
    callback-dialstring = "6083" !--- Number to callback.
    send-secret = "cisco" } }
```

Vous pouvez également utiliser RADIUS comme serveur AAA pour fournir les attributs de rappel au lieu de TACACS+. Un exemple de configuration RADIUS est fourni ici :

### Configuration RADIUS

```
tremens      Auth-Type = Local, Password = "cisco"
              Service-Type = Framed-User,
              !--- Service-Type(6) is Framed User(4). Cisco-AVPair =
              "lcp:callback-dialstring=6083", Cisco-AVPair =
              "lcp:send-secret=cisco"
```

**Remarque :** dans la configuration RADIUS indiquée ci-dessus, la commande Cisco AVPair **lcp:send-secret=cisco** est requise au moment de l'authentification du rappel. Si vous n'incluez pas cet AVPair, vous devez configurer le nom d'utilisateur et le mot de passe CHAP du routeur distant localement sur le serveur de rappel.

**Remarque :** Ce document traite principalement de TACACS+. Les débogages fournis dans ce document n'affichent pas de rappel initié par RADIUS.

**Remarque :** à partir de la version 12.1(7) de Cisco IOS, il est possible d'utiliser l'attribut RADIUS 19 de l'IETF (Internet Engineering Task Force) pour le rappel RNIS et Microsoft analogique. Dans ce cas, il n'est pas nécessaire d'utiliser les paires AVP de Cisco, comme indiqué dans la configuration précédente. Reportez-vous à l'exemple de configuration RADIUS de remplacement présenté ici :

### Configuration RADIUS alternative

```
tremens      Auth-Type = Local, Password = "cisco"
              Service-Type = callback framed
              !--- Service-Type (6) is callback
              framed (4). !--- Callback framed is also known as !---
Dialback-Framed-User. Callback =6083 !--- IETF RADIUS
Callback attribute (19) with the phone !--- number for
the callback.
```

**Remarque :** Les débogages RADIUS afficheront l'attribut RADIUS IETF 19 retourné au serveur de rappel.

Les configurations des deux routeurs utilisés dans cet exemple sont présentées ici :

### Tnt-buster (serveur de rappel)

```
version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Tnt-buster
!
boot system flash flash:c5300-i-mz.121-4
logging buffered 1000000 debugging
aaa new-model
aaa authentication login none none
aaa authentication ppp default group tacacs+ local
!--- AAA methods for PPP authentication. aaa
authorization network default group tacacs+ !--- AAA
authorization methods for RADIUS implementation. !---
Replace TACACS+ with RADIUS in the statements above. !
spe 1/0 1/23 firmware location
system:/ucode/microcom_firmware ! resource-pool disable
! ip subnet-zero no ip domain-lookup ! isdn switch-type
primary-net5 ! controller E1 0 !--- E1 interface that
accepts the initial call and performs the callback.
clock source line primary pri-group timeslots 1-31 ! !
!--- irrelevant output has been omitted. ! interface
Loopback0 ip address 2.2.2.2 255.255.255.255 ! interface
Ethernet0 ip address 10.200.20.42 255.255.255.0 !
interface Serial0:15 !--- D-channel for controller E1 0.
no ip address encapsulation ppp dialer rotary-group 1 !-
-- Assign E1 0 to rotary-group 1 (which is necessary for
dialout). !--- Rotary-group properties are defined in
interface Dialer 1. isdn switch-type primary-net5 no cdp
enable ! ! !--- irrelevant output has been omitted. ! !
interface Dialer1 !--- This is the interface for the
dialer rotary-group 1 configuration. ip unnumbered
Loopback0 encapsulation ppp dialer in-band dialer aaa !-
-- This allows AAA to retrieve the callback dial string
via AAA servers. !--- This command is required for
```

```

callback attributes to be obtained !--- from the AAA
server. dialer idle-timeout 60 dialer enable-timeout 5
!--- The time (in seconds) between initial call
disconnect and callback !--- initiation. dialer hold-
queue 20 !--- This holds 20 packets destined for the
remote destination until the !--- connection is made.
dialer-group 1 no peer default ip address !--- The peer
is not given an IP address from a pool. !--- IP pool can
be defined if necessary. ppp callback accept !--- Allows
the interface to accept a callback request from a remote
host. ppp authentication chap callin ! ip route 0.0.0.0
0.0.0.0 10.200.20.1 no ip http server ! dialer-list 1
protocol ip permit tacacs-server host 10.200.20.134 key
cisco !--- The IP address and key of the TACACS+ server.
! line con 0 exec-timeout 0 0 length 30 transport input
none line 1 24 line aux 0 line vty 0 4 no exec-banner
exec-timeout 0 0 login authentication none ! end

```

## Tremens (client de rappel)

```

version 12.1
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname tremens
!
username tnt-buster password 0 cisco
!--- Username and shared secret password used for CHAP
authentication. !--- The AAA server must have this
router hostname (tnt-buster) and !--- shared secret
(cisco) configured. ! ip subnet-zero no ip finger no ip
domain-lookup ! isdn switch-type basic-net3 ! interface
Loopback0 ip address 3.3.3.3 255.255.255.255 ! interface
Ethernet0 ip address 10.200.16.54 255.255.255.0 !
interface BRI0 !--- The interface used for dialin and
dialout. no ip address encapsulation ppp dialer pool-
member 1 !--- Assign BRI0 as member of dialer pool 1. !-
-- Dialer pool 1 is specified in interface Dialer 1.
isdn switch-type basic-net3 ppp authentication chap !
interface Dialer1 ip unnumbered Loopback0 encapsulation
ppp dialer pool 1 !--- Defines dialer pool 1. !--- BRI 0
is a member of this pool. dialer idle-timeout 60 dialer
string 8211 !--- The number to dial when dialing out for
the initial call. dialer hold-queue 20 !--- This holds
20 packets destined for the remote destination until the
!--- connection is made. dialer-group 1 no peer default
ip address no fair-queue no cdp enable ppp callback
request !--- Request PPP callback from the server. ppp
authentication chap ! ip route 2.2.2.2 255.255.255.255
Dialer1 !--- IP route for the dialer interface. no ip
http server ! dialer-list 1 protocol ip permit ! line
con 0 exec-timeout 0 0 transport input none line aux 0
line vty 0 4 exec-timeout 0 0 login ! end

```

## Vérification

Cette section présente des informations que vous pouvez utiliser pour vous assurer que votre configuration fonctionne correctement.

Certaines commandes **show** sont prises en charge par l'[Output Interpreter Tool](#) (clients

enregistrés uniquement), qui vous permet de voir une analyse de la sortie de la commande show.

- **show dialer interface type number** - affiche des informations générales de diagnostic pour les interfaces configurées pour le routage à établissement de connexion à la demande (DDR). Les adresses source et de destination du paquet qui a initié la numérotation sont affichées dans la ligne de `raison de numérotation`. Cette commande affiche également les compteurs de connexion.
- **show isdn status** : vous permet de vous assurer que le routeur communique correctement avec le commutateur RNIS. Dans le résultat, vérifiez que l'état de la couche 1 soit ACTIVE, et que l'état de la couche 2 = MULTIPLE\_FRAME\_ESTABLISHED s'affiche. Cette commande affiche également le nombre d'appels actifs.

## Dépannage

Cette section fournit des informations que vous pouvez utiliser pour dépanner votre configuration.

Référez-vous à [Référence des commandes de débogage de Cisco IOS version 12.0](#) pour plus d'informations sur les commandes de débogage.

### Commandes de dépannage (facultatif)

Certaines commandes **show** sont prises en charge par l'[Output Interpreter Tool](#) (clients enregistrés uniquement), qui vous permet de voir une analyse de la sortie de la commande show.

**Remarque** : avant d'émettre des commandes **debug**, reportez-vous à [Informations importantes sur les commandes de débogage](#).

- **debug isdn q931** : affiche la configuration des appels et le démontage de la connexion réseau RNIS (couche 3).
- **debug dialer [ événements / packets ]** : affiche les informations de débogage DDR sur les paquets reçus sur une interface de numérotation.
- **debug aaa authentication** - affiche des informations sur l'authentification AAA.
- **debug aaa Authorization** : affiche des informations sur l'autorisation AAA.
- **debug tacacs** : affiche les informations de débogage détaillées associées à TACACS+.
- **debug ppp negotiation** - affiche des informations sur le trafic et les échanges PPP pendant que la négociation des composants PPP est en cours, y compris LCP (Link Control Protocol), Authentication et NCP. Une négociation PPP réussie ouvre tout d'abord l'état LCP, puis procède à l'authentification, pour terminer par la négociation de NCP.
- **debug ppp authentication** - affiche les messages du protocole d'authentification PPP, y compris les échanges de paquets CHAP (Challenge Authentication Protocol) et les échanges PAP (Password Authentication Protocol). Si vous constatez une défaillance, vérifiez si le nom d'utilisateur et le mot de passe CHAP sont correctement configurés.
- **debug callback** : affiche les événements de rappel lorsque le routeur utilise un modem et un script de conversation pour rappeler sur une ligne de terminal. Comme cette commande concerne les modems et les scripts de discussion, elle n'est pas utilisée dans cette configuration.

### Exemple de sortie de débogage

```

tnt-buster#show debug
General OS:
    TACACS access control 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 protocol negotiation debugging is on
ISDN:
    ISDN Q931 packets debugging is on
    ISDN Q931 packets debug DSLs. (On/Off/No DSL:1/0/-)
    DSL 0 --> 7
    1 - - - - -
tnt-buster#
*Oct 16 08:59:26.403: ISDN Se0:15: RX <- SETUP pd = 8 callref = 0x4880
!--- incoming ISDN call setup message. *Oct 16 08:59:26.403: Sending Complete *Oct 16
08:59:26.403: Bearer Capability i = 0x8890 *Oct 16 08:59:26.403: Channel ID i = 0xA1839A *Oct 16
08:59:26.403: Calling Party Number i = 0xA1, '6083', Plan:ISDN, Type:National !--- Calling Party
Number is configured in the callback string on !--- the AAA server. *Oct 16 08:59:26.403: Called
Party Number i = 0x81, '211', Plan:ISDN, Type:Unknown *Oct 16 08:59:26.407: Locking Shift to
Codeset 6 *Oct 16 08:59:26.407: Codeset 6 IE 0x28 i = 'ISDN-EDU-4' *Oct 16 08:59:26.407: ISDN
Se0:15: TX -> CALL_PROC pd = 8 callref = 0xC880 *Oct 16 08:59:26.411: Channel ID i = 0xA9839A
*Oct 16 08:59:26.415: %LINK-3-UPDOWN: Interface Serial0:25, changed state to up *Oct 16
08:59:26.419: Se0:25 PPP: Treating connection as a callin *Oct 16 08:59:26.419: Se0:25 PPP:
Phase is ESTABLISHING, Passive Open *Oct 16 08:59:26.419: Se0:25 LCP: State is Listen *Oct 16
08:59:26.419: ISDN Se0:15: TX -> CONNECT pd = 8 callref = 0xC880 *Oct 16 08:59:26.419: Channel
ID i = 0xA9839A *Oct 16 08:59:26.459: ISDN Se0:15: RX <- CONNECT_ACK pd = 8 callref = 0x4880
*Oct 16 08:59:26.463: ISDN Se0:15: CALL_PROGRESS: CALL_CONNECTED call id 0x28, bchan 25, dsl 0
*Oct 16 08:59:26.551: Se0:25 LCP: I CONFREQ [Listen] id 126 len 18 !--- PPP LCP negotiation
begins. *Oct 16 08:59:26.555: Se0:25 LCP: AuthProto CHAP (0x0305C22305) *Oct 16 08:59:26.555:
Se0:25 LCP: MagicNumber 0x3E7BCBD2 (0x05063E7BCBD2) *Oct 16 08:59:26.555: Se0:25 LCP: Callback 0
(0x0D0300) *Oct 16 08:59:26.555: Se0:25 AAA/AUTHOR/FSM: (0): LCP succeeds trivially *Oct 16
08:59:26.555: Se0:25 LCP: O CONFREQ [Listen] id 1 len 15 *Oct 16 08:59:26.555: Se0:25 LCP:
AuthProto CHAP (0x0305C22305) *Oct 16 08:59:26.555: Se0:25 LCP: MagicNumber 0xE06953E4
(0x0506E06953E4) *Oct 16 08:59:26.555: Se0:25 LCP: O CONFACK [Listen] id 126 len 18 *Oct 16
08:59:26.555: Se0:25 LCP: AuthProto CHAP (0x0305C22305) *Oct 16 08:59:26.555: Se0:25 LCP:
MagicNumber 0x3E7BCBD2 (0x05063E7BCBD2) *Oct 16 08:59:26.555: Se0:25 LCP: Callback 0 (0x0D0300)
!--- Callback option is acknowledged (CONFACKed). *Oct 16 08:59:26.587: Se0:25 LCP: I CONFACK
[ACKsent] id 1 len 15 *Oct 16 08:59:26.587: Se0:25 LCP: AuthProto CHAP (0x0305C22305) *Oct 16
08:59:26.587: Se0:25 LCP: MagicNumber 0xE06953E4 (0x0506E06953E4) *Oct 16 08:59:26.587: Se0:25
LCP: State is Open *Oct 16 08:59:26.587: Se0:25 PPP: Phase is AUTHENTICATING, by both !--- PPP
Authentication begins. *Oct 16 08:59:26.587: Se0:25 CHAP: O CHALLENGE id 1 len 31 from "tnt-
buster" *Oct 16 08:59:26.611: Se0:25 CHAP: I CHALLENGE id 93 len 28 from "tremens" *Oct 16
08:59:26.611: Se0:25 CHAP: Waiting for peer to authenticate first *Oct 16 08:59:26.623: Se0:25
CHAP: I RESPONSE id 1 len 28 from "tremens" *Oct 16 08:59:26.623: AAA: parse name=Serial0:25 idb
type=13 tty=-1 *Oct 16 08:59:26.623: AAA: name=Serial0:25 flags=0x51 type=1 shelf=0 slot=0
adapter=0 port=0 channel=25 *Oct 16 08:59:26.623: AAA: parse name= idb type=-1 tty=-1 *Oct 16
08:59:26.623: AAA/MEMORY: create_user (0x6126C0AC) user='tremens' ruser='' port='Serial0:25'
rem_addr='6083/211' authen_type=CHAP service=PPP priv=1 *Oct 16 08:59:26.623: AAA/AUTHEN/START
(199889519): port='Serial0:25' list='' action=LOGIN service=PPP *Oct 16 08:59:26.623:
AAA/AUTHEN/START (199889519): using "default" list *Oct 16 08:59:26.623: AAA/AUTHEN/START
(199889519): Method=tacacs+ (tacacs+) !--- Use TACACS+ as AAA method for the default list. *Oct
16 08:59:26.623: TAC+: send AUTHEN/START packet ver=193 id=199889519 *Oct 16 08:59:26.623: TAC+:
Using default tacacs server-group "tacacs+" list. *Oct 16 08:59:26.623: TAC+: Opening TCP/IP to
10.200.20.134/49 timeout=5 *Oct 16 08:59:26.627: TAC+: Opened TCP/IP handle 0x610C4D40 to
10.200.20.134/49 *Oct 16 08:59:26.627: TAC+: 10.200.20.134 (199889519) AUTHEN/START/LOGIN/CHAP
queued *Oct 16 08:59:26.827: TAC+: (199889519) AUTHEN/START/LOGIN/CHAP processed *Oct 16
08:59:26.827: TAC+: ver=193 id=199889519 received AUTHEN status = PASS *Oct 16 08:59:26.827:
AAA/AUTHEN (199889519): status = PASS !--- AAA authentication succeeds. *Oct 16 08:59:26.827:
TAC+: Closing TCP/IP 0x610C4D40 connection to 10.200.20.134/49 *Oct 16 08:59:26.827: Se0:25
AAA/AUTHOR/LCP: Authorize LCP *Oct 16 08:59:26.827: Se0:25 AAA/AUTHOR/LCP (4028243213):

```

```

Port='Serial0:25' list='' service=NET *Oct 16 08:59:26.827: AAA/AUTHOR/LCP: Se0:25 (4028243213)
user='tremens' *Oct 16 08:59:26.827: Se0:25 AAA/AUTHOR/LCP (4028243213): send AV service=ppp
*Oct 16 08:59:26.827: Se0:25 AAA/AUTHOR/LCP (4028243213): send AV protocol=lcp *Oct 16
08:59:26.827: Se0:25 AAA/AUTHOR/LCP (4028243213): found list "default" *Oct 16 08:59:26.827:
Se0:25 AAA/AUTHOR/LCP (4028243213): Method=tacacs+ (tacacs+) *Oct 16 08:59:26.827:
AAA/AUTHOR/TAC+: (4028243213): user=tremens *Oct 16 08:59:26.827: AAA/AUTHOR/TAC+: (4028243213):
send AV service=ppp *Oct 16 08:59:26.827: AAA/AUTHOR/TAC+: (4028243213): send AV protocol=lcp
*Oct 16 08:59:26.827: TAC+: using previously set server 10.200.20.134 from group tacacs+ *Oct 16
08:59:26.827: TAC+: Opening TCP/IP to 10.200.20.134/49 timeout=5 *Oct 16 08:59:26.831: TAC+:
Opened TCP/IP handle 0x61269588 to 10.200.20.134/49 *Oct 16 08:59:26.831: TAC+: Opened
10.200.20.134 index=1 *Oct 16 08:59:26.831: TAC+: 10.200.20.134 (4028243213) AUTHOR/START queued
*Oct 16 08:59:27.031: TAC+: (4028243213) AUTHOR/START processed *Oct 16 08:59:27.031: TAC+:
(4028243213): received author response status = PASS_ADD *Oct 16 08:59:27.031: TAC+: Closing
TCP/IP 0x61269588 connection to 10.200.20.134/49 *Oct 16 08:59:27.031: Se0:25 AAA/AUTHOR
(4028243213): Post authorization status = PASS_ADD *Oct 16 08:59:27.031: Se0:25 AAA/AUTHOR/LCP:
Processing AV service=ppp *Oct 16 08:59:27.031: Se0:25 AAA/AUTHOR/LCP: Processing AV
protocol=lcp *Oct 16 08:59:27.031: Se0:25 AAA/AUTHOR/LCP: Processing AV callback-dialstring=
6083 !--- Callback dial string sent from the AAA server. *Oct 16 08:59:27.031: Se0:25
AAA/AUTHOR/LCP: Processing AV send-secret=cisco *Oct 16 08:59:27.031: Se0:25 CHAP: O SUCCESS id
1 len 4 *Oct 16 08:59:27.031: Se0:25 CHAP: Processing saved Challenge, id 93 *Oct 16
08:59:27.031: Se0:25 DDR: Authenticated host tremens with no matching dialer map *Oct 16
08:59:27.031: AAA: parse name=Serial0:25 idb type=13 tty=-1 *Oct 16 08:59:27.031: AAA:
name=Serial0:25 flags=0x51 type=1 shelf=0 slot=0 adapter=0 port=0 channel=25 *Oct 16
08:59:27.031: AAA: parse name= idb type=-1 tty=-1 *Oct 16 08:59:27.031: AAA/MEMORY: create_user
(0x610DD96C) user='tremens' ruser='' port='Serial0:25' rem_addr='6083/211' authen_type=CHAP
service=PPP priv=1 *Oct 16 08:59:27.035: AAA/AUTHEN/START (4099567767): port='Serial0:25'
list='' action=SENDAUTH service=PPP *Oct 16 08:59:27.035: AAA/AUTHEN/START (4099567767): using
"default" list *Oct 16 08:59:27.035: AAA/AUTHEN/START (4099567767): Method=tacacs+ (tacacs+)
*Oct 16 08:59:27.035: TAC+: Look for cached secret first for sendauth *Oct 16 08:59:27.035:
AAA/AUTHEN/SENDAUTH (4099567767): found cached secret for tremens *Oct 16 08:59:27.035:
AAA/AUTHEN (4099567767): status = PASS *Oct 16 08:59:27.035: AAA/MEMORY: free_user (0x610DD96C)
user='tremens' ruser='' port='Serial0:25' rem_addr='6083/211' authen_type=CHAP service=PPP
priv=1 *Oct 16 08:59:27.035: Se0:25 CHAP: O RESPONSE id 93 len 31 from "tnt-buster" *Oct 16
08:59:27.055: Se0:25 CHAP: I SUCCESS id 93 len 4 !--- CHAP is successful. *Oct 16 08:59:27.055:
FA0: Same state, 0 *Oct 16 08:59:27.055: DSES FA0: Session create *Oct 16 08:59:27.055:
AAA/MEMORY: dup_user (0x61069398) user='tremens' ruser='' port='Serial0:25' rem_addr='6083/211'
authen_type=CHAP service=PPP priv=1 source='create callback' *Oct 16 08:59:27.055: Se0:25 DDR:
PPP callback Callback server starting to tremens 6083 !--- DDR starts PPP callback procedures.
*Oct 16 08:59:27.055: Se0:25 DDR: disconnecting call !--- Call is disconnected. *Oct 16
08:59:27.059: ISDN Se0:15: TX -> DISCONNECT pd = 8 callref = 0xC880 *Oct 16 08:59:27.059: Cause
i = 0x8090 - Normal call clearing *Oct 16 08:59:27.071: Se0:25 IPCP: PPP phase is
AUTHENTICATING, discarding packet *Oct 16 08:59:27.091: ISDN Se0:15: RX <- RELEASE pd = 8
callref = 0x4880 *Oct 16 08:59:27.091: ISDN Se0:15: TX -> RELEASE_COMP pd = 8 callref = 0xC880
*Oct 16 08:59:27.103: %LINK-3-UPDOWN: Interface Serial0:25, changed state to down *Oct 16
08:59:27.103: Se0:25 PPP: Phase is TERMINATING *Oct 16 08:59:27.103: Se0:25 LCP: State is Closed
*Oct 16 08:59:27.103: Se0:25 PPP: Phase is DOWN *Oct 16 08:59:27.103: Se0:25 DDR: disconnecting
call *Oct 16 08:59:32.055: DDR: Callback timer expired !--- Callback timer (5 seconds) expires.
!--- This is configured through the dialer enable-timeout 5 command.

*Oct 16 08:59:32.055: Dil DDR: beginning callback to tremens 6083
*Oct 16 08:59:32.055: Se0:15 DDR: rotor dialout [priority]
*Oct 16 08:59:32.055: Se0:15 DDR: Dialing cause dialer session 0xFA0
*Oct 16 08:59:32.055: Se0:15 DDR: Attempting to dial 6083
!--- Callback number dialed. *Oct 16 08:59:32.055: ISDN Se0:15: TX -> SETUP pd = 8 callref =
0x0005 *Oct 16 08:59:32.055: Bearer Capability i = 0x8890 *Oct 16 08:59:32.055: Channel ID i =
0xA9839F *Oct 16 08:59:32.055: Called Party Number i = 0x81, '6083', Plan:ISDN, Type:Unknown
*Oct 16 08:59:32.095: ISDN Se0:15: RX <- CALL_PROC pd = 8 callref = 0x8005 *Oct 16 08:59:32.095:
Channel ID i = 0xA9839F *Oct 16 08:59:32.311: ISDN Se0:15: RX <- CONNECT pd = 8 callref = 0x8005
!--- Call is connected. *Oct 16 08:59:32.311: Connected Number i = 0xA136303833 *Oct 16
08:59:32.315: Locking Shift to Codeset 6 *Oct 16 08:59:32.315: Codeset 6 IE 0x28 i = 'ISDN-EDU-
4' *Oct 16 08:59:32.323: %LINK-3-UPDOWN: Interface Serial0:30, changed state to up *Oct 16
08:59:32.323: AAA/MEMORY: dup_user (0x612B7F70) user='tremens' ruser='' port='Serial0:25'
rem_addr='6083/211' authen_type=CHAP service=PPP priv=1 source='callback dialout' *Oct 16
08:59:32.323: DDR: Freeing callback to tremens 6083 *Oct 16 08:59:32.323: DDR: removing

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callback, 0 packets unqueued and discarded \*Oct 16 08:59:32.323: AAA/MEMORY: free\_user (0x61069398) user='tremens' ruser='' port='Serial0:25' rem\_addr='6083/211' authen\_type=CHAP service=PPP priv=1 \*Oct 16 08:59:32.323: Se0:30 PPP: Treating connection as a callout !--- PPP negotiation begins. \*Oct 16 08:59:32.323: Se0:30 PPP: Phase is ESTABLISHING, Active Open \*Oct 16 08:59:32.323: Se0:30 PPP: No remote authentication for callback \*Oct 16 08:59:32.327: Se0:30 AAA/AUTHOR/FSM: (0): LCP succeeds trivially \*Oct 16 08:59:32.327: Se0:30 LCP: O CONFREQ [Closed] id 5 len 10 \*Oct 16 08:59:32.327: Se0:30 LCP: MagicNumber 0xE0696A6F (0x0506E0696A6F) \*Oct 16 08:59:32.327: ISDN Se0:15: TX -> CONNECT\_ACK pd = 8 callref = 0x0005 \*Oct 16 08:59:32.351: Se0:30 LCP: I CONFREQ [REQsent] id 127 len 15 \*Oct 16 08:59:32.351: Se0:30 LCP: AuthProto CHAP (0x0305C22305) \*Oct 16 08:59:32.351: Se0:30 LCP: MagicNumber 0x3E7BE27C (0x0506E7BE27C) \*Oct 16 08:59:32.355: Se0:30 LCP: O CONFACK [REQsent] id 127 len 15 \*Oct 16 08:59:32.355: Se0:30 LCP: AuthProto CHAP (0x0305C22305) \*Oct 16 08:59:32.355: Se0:30 LCP: MagicNumber 0x3E7BE27C (0x0506E7BE27C) \*Oct 16 08:59:32.359: Se0:30 LCP: I CONFACK [ACKsent] id 5 len 10 \*Oct 16 08:59:32.359: Se0:30 LCP: MagicNumber 0xE0696A6F (0x0506E0696A6F) \*Oct 16 08:59:32.359: Se0:30 LCP: State is Open \*Oct 16 08:59:32.359: Se0:30 PPP: Phase is AUTHENTICATING, by the peer !--- Authentication begins. \*Oct 16 08:59:32.359: Se0:30 AAA/AUTHOR/LCP: Authorize LCP \*Oct 16 08:59:32.359: Se0:30 AAA/AUTHOR/LCP (190918816): Port='Serial0:25' list='' service=NET \*Oct 16 08:59:32.359: AAA/AUTHOR/LCP: Se0:30 (190918816) user='tremens' \*Oct 16 08:59:32.359: Se0:30 AAA/AUTHOR/LCP (190918816): send AV service=ppp \*Oct 16 08:59:32.359: Se0:30 AAA/AUTHOR/LCP (190918816): send AV protocol=lcp \*Oct 16 08:59:32.359: Se0:30 AAA/AUTHOR/LCP (190918816): found list "default" \*Oct 16 08:59:32.359: Se0:30 AAA/AUTHOR/LCP (190918816): Method=tacacs+ (tacacs+) \*Oct 16 08:59:32.363: AAA/AUTHOR/TAC+: (190918816): user=tremens \*Oct 16 08:59:32.363: AAA/AUTHOR/TAC+: (190918816): send AV service=ppp \*Oct 16 08:59:32.363: AAA/AUTHOR/TAC+: (190918816): send AV protocol=lcp \*Oct 16 08:59:32.363: TAC+: using previously set server 10.200.20.134 from group tacacs+ \*Oct 16 08:59:32.363: TAC+: Opening TCP/IP to 10.200.20.134/49 timeout=5 \*Oct 16 08:59:32.363: TAC+: Opened TCP/IP handle 0x612B6A1C to 10.200.20.134/49 \*Oct 16 08:59:32.363: TAC+: Opened 10.200.20.134 index=1 \*Oct 16 08:59:32.363: TAC+: 10.200.20.134 (190918816) AUTHOR/START queued \*Oct 16 08:59:32.563: TAC+: (190918816) AUTHOR/START processed \*Oct 16 08:59:32.563: TAC+: (190918816): received author response status = PASS\_ADD \*Oct 16 08:59:32.563: TAC+: Closing TCP/IP 0x612B6A1C connection to 10.200.20.134/49 \*Oct 16 08:59:32.563: Se0:30 AAA/AUTHOR (190918816): Post authorization status = PASS\_ADD \*Oct 16 08:59:32.563: Se0:30 AAA/AUTHOR/LCP: Processing AV service=ppp \*Oct 16 08:59:32.563: Se0:30 AAA/AUTHOR/LCP: Processing AV protocol=lcp \*Oct 16 08:59:32.563: Se0:30 AAA/AUTHOR/LCP: Processing AV callback-dialstring= 6083 \*Oct 16 08:59:32.563: Se0:30 AAA/AUTHOR/LCP: Processing AV send-secret=cisco \*Oct 16 08:59:32.563: Se0:30 CHAP: I CHALLENGE id 94 len 28 from "tremens" !--- An incoming CHAP challenge is received. \*Oct 16 08:59:32.563: AAA: parse name=Serial0:30 idb type=13 tty=-1 \*Oct 16 08:59:32.563: AAA: name=Serial0:30 flags=0x51 type=1 shelf=0 slot=0 adapter=0 port=0 channel=30 \*Oct 16 08:59:32.563: AAA: parse name= idb type=-1 tty=-1 \*Oct 16 08:59:32.563: AAA/MEMORY: create\_user (0x612B8098) user='tremens' ruser='' port='Serial0:30' rem\_addr='6083/6083' authen\_type=CHAP service=PPP priv=1 \*Oct 16 08:59:32.567: AAA/AUTHEN/START (763006247): port='Serial0:30' list='' action=SENDAUTH service=PPP \*Oct 16 08:59:32.567: AAA/AUTHEN/START (763006247): using "default" list \*Oct 16 08:59:32.567: AAA/AUTHEN/START (763006247): Method=tacacs+ (tacacs+) \*Oct 16 08:59:32.567: TAC+: Look for cached secret first for sendauth \*Oct 16 08:59:32.567: AAA/AUTHEN/SENDAUTH (763006247): found cached secret for tremens \*Oct 16 08:59:32.567: AAA/AUTHEN (763006247): status = PASS \*Oct 16 08:59:32.567: AAA/MEMORY: free\_user (0x612B8098) user='tremens' ruser='' port='Serial0:30' rem\_addr='6083/6083' authen\_type=CHAP service=PPP priv=1 \*Oct 16 08:59:32.567: Se0:30 CHAP: O RESPONSE id 94 len 31 from "tnt-buster" \*Oct 16 08:59:32.587: Se0:30 CHAP: I SUCCESS id 94 len 4 !--- Authentication is successful. \*Oct 16 08:59:32.587: Se0:30 PPP: Phase is UP \*Oct 16 08:59:32.587: Se0:30 AAA/AUTHOR/FSM: (0): Can we start IPCP? \*Oct 16 08:59:32.587: Se0:30 AAA/AUTHOR/FSM (3211893880): Port='Serial0:25' list='' service=NET \*Oct 16 08:59:32.587: AAA/AUTHOR/FSM: Se0:30 (3211893880) user='tremens' \*Oct 16 08:59:32.587: Se0:30 AAA/AUTHOR/FSM (3211893880): send AV service=ppp \*Oct 16 08:59:32.587: Se0:30 AAA/AUTHOR/FSM (3211893880): found list "default" \*Oct 16 08:59:32.587: Se0:30 AAA/AUTHOR/FSM (3211893880): Method=tacacs+ (tacacs+) \*Oct 16 08:59:32.587: AAA/AUTHOR/TAC+: (3211893880): user=tremens \*Oct 16 08:59:32.587: AAA/AUTHOR/TAC+: (3211893880): send AV service=ppp \*Oct 16 08:59:32.587: AAA/AUTHOR/TAC+: (3211893880): send AV protocol=ip \*Oct 16 08:59:32.587: TAC+: using previously set server 10.200.20.134 from group tacacs+ \*Oct 16 08:59:32.587: TAC+: Opening TCP/IP to 10.200.20.134/49 timeout=5 \*Oct 16 08:59:32.591: TAC+: Opened TCP/IP handle 0x612B6C80 to 10.200.20.134/49 \*Oct 16 08:59:32.591: TAC+: Opened 10.200.20.134 index=1 \*Oct 16 08:59:32.591: TAC+: 10.200.20.134 (3211893880) AUTHOR/START queued \*Oct 16 08:59:32.791: TAC+: (3211893880) AUTHOR/START processed \*Oct 16 08:59:32.791: TAC+: (3211893880): received author response status = PASS\_ADD \*Oct 16 08:59:32.791: TAC+: Closing TCP/IP 0x612B6C80 connection to 10.200.20.134/49 \*Oct 16

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08:59:32.791: Se0:30 AAA/AUTHOR (3211893880): Post authorization status = PASS_ADD *Oct 16
08:59:32.791: Se0:30 AAA/AUTHOR/FSM: We can start IPCP !--- IPCP negotiation begins. *Oct 16
08:59:32.791: Se0:30 IPCP: O CONFREQ [Closed] id 5 len 10 *Oct 16 08:59:32.791: Se0:30 IPCP:
Address 2.2.2.2 (0x030602020202) *Oct 16 08:59:32.791: Se0:30 IPCP: I CONFREQ [REQsent] id 111
len 10 *Oct 16 08:59:32.791: Se0:30 IPCP: Address 3.3.3.3 (0x030603030303) *Oct 16 08:59:32.791:
Se0:30 AAA/AUTHOR/IPCP: Start. Her address 3.3.3.3, we want 0.0.0.0 *Oct 16 08:59:32.791: Se0:30
AAA/AUTHOR/IPCP (3713413027): Port='Serial0:25' list='' service=NET *Oct 16 08:59:32.791:
AAA/AUTHOR/IPCP: Se0:30 (3713413027) user='tremens' *Oct 16 08:59:32.791: Se0:30 AAA/AUTHOR/IPCP (3713413027):
send AV service=ppp *Oct 16 08:59:32.791: Se0:30 AAA/AUTHOR/IPCP (3713413027): send AV
protocol=ip *Oct 16 08:59:32.791: Se0:30 AAA/AUTHOR/IPCP (3713413027): send AV
addr*3.3.3.3 *Oct 16 08:59:32.791: Se0:30 AAA/AUTHOR/IPCP (3713413027): found list "default"
*Oct 16 08:59:32.791: Se0:30 AAA/AUTHOR/IPCP (3713413027): Method=tacacs+ (tacacs+) *Oct 16
08:59:32.795: AAA/AUTHOR/TAC+: (3713413027): user=tremens *Oct 16 08:59:32.795: AAA/AUTHOR/TAC+:
(3713413027): send AV service=ppp *Oct 16 08:59:32.795: AAA/AUTHOR/TAC+: (3713413027): send AV
protocol=ip *Oct 16 08:59:32.795: AAA/AUTHOR/TAC+: (3713413027): send AV addr*3.3.3.3 !--- AAA
Attribute Value Pairs. *Oct 16 08:59:32.795: TAC+: using previously set server 10.200.20.134
from group tacacs+ *Oct 16 08:59:32.795: TAC+: Opening TCP/IP to 10.200.20.134/49 timeout=5 *Oct
16 08:59:32.795: TAC+: Opened TCP/IP handle 0x61269588 to 10.200.20.134/49 *Oct 16 08:59:32.795:
TAC+: Opened 10.200.20.134 index=1 *Oct 16 08:59:32.795: TAC+: 10.200.20.134 (3713413027)
AUTHOR/START queued *Oct 16 08:59:32.995: TAC+: (3713413027) AUTHOR/START processed *Oct 16
08:59:32.995: TAC+: (3713413027): received author response status = PASS_ADD *Oct 16
08:59:32.995: TAC+: Closing TCP/IP 0x61269588 connection to 10.200.20.134/49 *Oct 16
08:59:32.995: Se0:30 AAA/AUTHOR (3713413027): Post authorization status = PASS_ADD *Oct 16
08:59:32.995: Se0:30 AAA/AUTHOR/IPCP: Processing AV service=ppp *Oct 16 08:59:32.995: Se0:30
AAA/AUTHOR/IPCP: Processing AV protocol=ip *Oct 16 08:59:32.995: Se0:30 AAA/AUTHOR/IPCP:
Processing AV addr*3.3.3.3 *Oct 16 08:59:32.995: Se0:30 AAA/AUTHOR/IPCP: Authorization succeeded
*Oct 16 08:59:32.995: Se0:30 AAA/AUTHOR/IPCP: Done. Her address 3.3.3.3, we want 3.3.3.3 *Oct 16
08:59:32.995: Se0:30 IPCP: O CONFACK [REQsent] id 111 len 10 *Oct 16 08:59:32.995: Se0:30 IPCP:
Address 3.3.3.3 (0x030603030303) *Oct 16 08:59:32.995: Se0:30 IPCP: I CONFACK [ACKsent] id 5 len
10 *Oct 16 08:59:32.995: Se0:30 IPCP: Address 2.2.2.2 (0x030602020202) *Oct 16 08:59:32.995:
Se0:30 IPCP: State is Open *Oct 16 08:59:32.999: Se0:30 DDR: dialer protocol up *Oct 16
08:59:32.999: Se0:30: Call connected, 0 packets unqueued, 0 transmitted, 0 discarded *Oct 16
08:59:32.999: Dial IPCP: Install route to 3.3.3.3 !--- Route is installed to remote device. *Oct
16 08:59:33.587: %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0:30, changed state to up
*Oct 16 08:59:38.323: %ISDN-6-CONNECT: Interface Serial0:30 is now connected to 6083 unknown !!--
- Call is Connected.
```

## Informations connexes

- [Page d'assistance technique sur les technologies de numérotation et d'accès](#)
- [Support et documentation techniques - Cisco Systems](#)