

# Configuration et dépannage de la signalisation E1 R2

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## [Introduction](#)

Ce document explique les entrées des commandes progressives qui sont nécessaires pour la mise en œuvre de la signalisation E1 R2. Ce document donne également des informations de dépannage avec des commandes de débogage.

**Remarque :** Avant d'utiliser ce document, il est recommandé de lire la [théorie de la signalisation E1 R2 pour la](#) première fois.

## [Conditions préalables](#)

### [Conditions requises](#)

Avant de tenter cette configuration, assurez-vous de respecter les conditions requises suivantes :

- La signalisation R2 s'applique uniquement à E1.
- La signalisation R2 n'est pas prise en charge sur le routeur Cisco MC3810.
- Pour exécuter la signalisation R2 sur les routeurs de la gamme Cisco 2600/3600, ce matériel est requis : VWIC-1MFT-E1 ou VWIC-2MFT-E1 ou VWIC-2MFT-E1-DI avec l'un de ces

modules de densité vocale : [NM-HDV](#) (High Density Voice Network Module) ou NM-HD-2VE (module de réseau voix/télécopie de communications IP à 2 emplacements) .

- Définissez la commande **ds0-group** (ou **cas-group**, basée sur la version Cisco IOS®) sur les contrôleurs E1 (AS5x00, routeurs Cisco 2600/3600).
- Utilisez la commande **cas-custom** afin de personnaliser les variantes E1 R2 pour différents pays ou régions.

## Components Used

Les informations de ce document sont basées sur cette version logicielle et matérielle :

- Cisco AS5300 avec le logiciel Cisco IOS Version 12.0.7T

**Remarque** : la signalisation E1 R2 a été introduite sur les routeurs de la gamme Cisco 2600/3600 dans les versions 12.1.2XH et 12.1(3)T du logiciel Cisco IOS.

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

For more information on document conventions, refer to the [Cisco Technical Tips Conventions](#).

## Configuration

Cette section présente les informations que vous pouvez utiliser pour configurer E1 R2.

**Remarque** : Pour obtenir des informations supplémentaires sur les commandes utilisées dans ce document, reportez-vous à l'[Outil de recherche de commandes](#) (clients [enregistrés](#) uniquement).

## [AS5300 : Cisco IOS - Compatibilité logicielle de la carte de fonction vocale \(VFC\)](#)

Avant de mettre en oeuvre la signalisation E1 R2 dans un routeur Cisco AS5300, assurez-vous que votre version du logiciel Cisco IOS est compatible avec le Cisco VCware du module E1. Afin de vérifier la compatibilité du logiciel Cisco IOS, référez-vous à la [matrice de compatibilité Cisco VCWare pour le Cisco AS5300](#). Si les versions sont incompatibles, les modules du processeur de signal numérique (DSP) de la carte vocale ne se chargent pas et le traitement du signal vocal ne se produit pas.

Généralement, si la version de Cisco VCWare est incompatible avec le logiciel Cisco IOS, vous pouvez entrer la commande **show vfc slot\_number interface** afin de voir ceci comme indiqué dans cet exemple.

```
eefje#show vfc 1 interface
Rx: in ptr 18, outptr 0
Tx: in ptr 14  outptr 14
0 in hw queue, 0 queue head , 0 queue tail
Hardware is VFC out-of-band channel
Interface : state RESET DSP instance (0x61048284)
dsp_number 0, Channel ID 0
```

```
TX outstanding 0, max TX outstanding 0
Received 18 packets, 1087 bytes, 0 giant packets
0 drops, 0 no buffers, 0 input errors
121 bytes output, 14 frames output
0 bounce errors 0
```

```
DSP module 1 is not installed
DSP module 2 is not installed
DSP module 3 is not installed
DSP module 4 is not installed
DSP module 5 is not installed
```

Dans le premier exemple de sortie de la commande **show vfc slot\_number interface**, le numéro de module DSP n'est pas installé montre que les versions sont incompatibles pour ce numéro de module.

Ce deuxième jeu de résultats est un exemple des modules DSP dont la version correcte de Cisco VCWare est chargée :

```
eefje#show vfc 1 interface
Rx: in ptr 24, outptr 0
TX: in ptr 15 outptr 15
0 in hw queue, 0 queue head , 0 queue tail
Hardware is VFC out-of-band channel
Interface : state RESET DSP instance (0x618C6088)
dsp_number 0, Channel ID 0
TX outstanding 0, max TX outstanding 0
Received 283288 packets, 15864278 bytes, 0 giant packets
0 drops, 0 no buffers, 0 input errors
1416459 bytes output, 141647 frames output
0 bounce errors 0
```

```
Slot 1, DSPM 1 (C542), DSP 1, Channel 1
State RESET, DSP instance (0x61914BDC)
TX outstanding 0, max TX outstanding 8
Received 0 packets, 0 bytes, 0 giant packets
0 drops, 0 no buffers, 0 input errors
0 bytes output, 0 frames output
0 bounce errors 0
```

```
Slot 1, DSPM 1 (C542), DSP 2, Channel 1
State RESET, DSP instance (0x6191510C)
TX outstanding 0, max TX outstanding 8
Received 0 packets, 0 bytes, 0 giant packets
0 drops, 0 no buffers, 0 input errors
0 bytes output, 0 frames output
0 bounce errors 0
```

Afin de vérifier la version de Cisco VCWare installée, entrez la commande **show vfc slot\_number version vcware**, comme indiqué dans cet exemple :

```
eefje#show vfc 1 version vcware
Voice Feature Card in Slot 1:
```

```
VCware Version : 4.10
ROM Monitor Version : 1.2
DSPware Version :
Technology : C542
```

**Remarque :** assurez-vous que la version de la technologie Cisco VCWare (c549 ou c542) correspond à la technologie DSP VFC installée (DSPM-542 : prise en charge vocale à densité

unique ou DSPM-549 : haute densité).

## Configuration de E1 R2

Complétez ces étapes afin de configurer E1 R2 :

1. Configurez le contrôleur E1 qui se connecte au commutateur ou autocommutateur privé (PBX). Assurez-vous que le tramage et le codage de ligne de l'E1 sont correctement définis.
2. Pour le tramage E1, choisissez **CRC** ou **non CRC**.
3. Pour l'écrêtage de ligne E1, choisissez **HDB3** ou **AMI**.
4. Pour la source de l'horloge E1, sélectionnez **interne** ou **ligne**. Gardez à l'esprit que les différents PBX ont des exigences différentes sur la source d'horloge.
5. [Configurez la signalisation de ligne](#).
6. [Configurez la signalisation interregistre](#).
7. Personnalisez la configuration à l'aide de la commande **cas-custom**.

### [Configurer la signalisation de ligne](#)

Utilisez cette séquence de commandes afin de définir votre signalisation de ligne.

```
eefje(config)#controller E1 0
eefje(config-controller)#ds0-group 1 timeslots 1-15 type ?
...
r2-analog      R2 ITU Q411
r2-digital     R2 ITU Q421
r2-pulse       R2 ITU Supplement 7
...
```

Il s'agit de la séquence de commandes du logiciel Cisco IOS Version 11.3.

```
eefje(config)#controller E1 0
eefje(config-controller)#cas-group 1 timeslot 1-15 type ?
...
```

**Remarque :** si vous effectuez une mise à niveau du logiciel Cisco IOS Version 11.3 vers 12.0, la nouvelle commande remplace automatiquement l'ancienne.

### [Configuration de la signalisation interregistre](#)

Cet exemple de séquence de commandes montre comment configurer les différents types de signalisation interregistre :

```
eefje(config)#controller E1 0
eefje(config-controller)#ds0-group 1 timeslots 1-15 type r2-digital ?
dtmf          DTMF tone signaling
r2-compelled   R2 Compelled Register Signaling
r2-non-compelled R2 Non Compelled Register Signaling
r2-semi-compelled R2 Semi Compelled Register Signaling
```

La prise en charge DNIS (Dialed Number Identification Service) est activée par défaut dans la mise en oeuvre de R2 par Cisco. Si vous activez l'option d'identification automatique de numéro (ANI), la collecte des informations DNIS est toujours effectuée. La spécification de l'option ANI ne désactive pas la collection DNIS. DNIS est le numéro appelé. ANI est le numéro de l'appelant. Par

exemple, si vous configurez un routeur appelé A pour appeler un routeur appelé B, le numéro DNIS est attribué au routeur B et le numéro ANI au routeur A. ANI est similaire à l'ID de l'appelant.

## [Personnalisation d'E1 R2 à l'aide de la commande cas-custom](#)

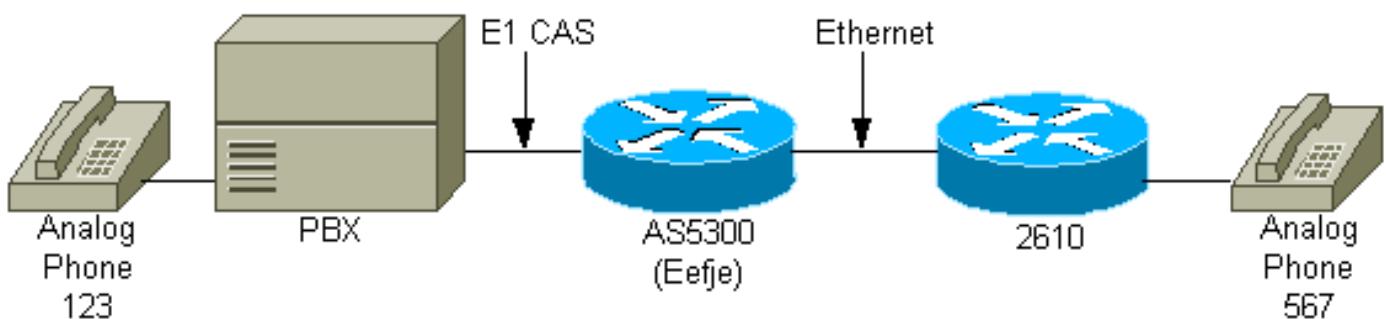
Les sous-commandes sous la commande **cas-custom** sont utilisées afin de prendre en charge les variantes de pays. Ils sont également utilisés afin de personnaliser les paramètres de signalisation associée au canal (CAS). Cette séquence de commandes illustre comment afficher toutes les options de commande **cas-custom**.

```
eefje(config)#controller E1 0
eefje(config-controller)#cas-custom 1
eefje(config-ctrl-cas)#
CAS custom commands:
ani-digits          Expected number of ANI digits
ani-timeout         Timeout for ANI digits
answer-guard-time   Wait Between Group-B Answer Signal And Line Answer
answer-signal        Answer signal to be used
caller-digits       Digits to be collected before requesting CallerID
category            Category signal
country             Country Name
debounce-time       Debounce Timer
default              Set a command to its defaults
dnis-complete        Send I-15 after DNIS digits for dial-out
dnis-digits         Expected number of DNIS digits
exit                Exit from cas custom mode
groupa-callerid-end Send Group-A Caller ID End
invert-abcd          invert the ABCD bits before TX and after rx
ka                  kA Signal
kd                  KD Signal
metering            R2 network is sending metering signal
nc-congestion        Non Compelled Congestion signal
no                  Negate a command or set its defaults
proceed-to-send      Suppress proceed-to-send signal for pulsed line signaling
release-ack          Send Release Acknowledgment to Clear Forward
release-guard-time  Release Guard Timer
request-category     DNIS Digits to be collected before requesting category
seizure-ack-time    Seizure to Acknowledge timer
unused-abcd          Unused ABCD bit values
```

Pour plus d'informations sur les paramètres de la commande **cas-custom**, référez-vous à [Personnalisation de E1 R2 avec la commande cas-custom](#).

## [Diagramme du réseau](#)

Ce document utilise cette configuration du réseau.



## Configurations

Pour les besoins de ce document, voici les trois configurations différentes de R2 qui sont affichées sur l'interface E1 :

- [R2 Numérique non obligatoire](#)
- [Semi-commandé numérique de R2](#)
- [ANI numérique obligatoire de R2](#)

Les configurations ont été modifiées afin de n'afficher que les informations discutées dans ce document.

### eefje configuré pour R2 Digital Non-Obligated

```
hostname eefje
!
controller E1 0
  clock source line primary
  ds0-group 1 timeslots 1-15 type r2-digital r2-non-
compelled
  cas-custom 1
!--- For more information on these commands !--- refer
to ds0-group and cas-custom.

!
voice-port 0:1
  cptone BE
!--- The cptone command is country specific. For more !-
-- information on this command, refer to cptone .

!
dial-peer voice 123 pots
  destination-pattern 123
  direct-inward-dial
  port 0:1
  prefix 123
!
dial-peer voice 567 voip
  destination-pattern 567
  session target ipv4:2.0.0.2
!
```

### eefje configuré pour R2 Digital Semi-Compellé

```
hostname eefje
!
controller E1 0
  clock source line primary
  ds0-group 1 timeslots 1-15 type r2-digital r2-semi-
compelled
  cas-custom 1
!--- For more information on these commands !--- refer
to ds0-group and cas-custom .

!
voice-port 0:1
  cptone BE
!--- The cptone command is country specific. For more !-
-- information on this command, refer to cptone .
```

```

dial-peer voice 123 pots
destination-pattern 123
direct-inward-dial
port 0:1
prefix 123
!
dial-peer voice 567 voip
destination-pattern 567
session target ipv4:2.0.0.2
!
```

## eefje configuré pour l'ANI numérique obligatoire de R2

```

hostname eefje
! controller E1 0 clock source line primary ds0-group
1 timeslots 1-15 type r2-digital r2-compelled ani cas-
custom 1
!--- For more information on these commands !--- refer
to ds0-group and cas-custom .

voice-port 0:1 cptone BE
!--- The cptone command is country specific. For more !-
-- information on this command, refer to cptone .

dial-peer voice 123 pots destination-pattern 123 direct-
inward-dial port
0:1 prefix 123
!
dial-peer voice 567 voip destination-pattern 567 session
target ipv4:2.0.0.2
!
```

## Vérification

Aucune procédure de vérification n'est disponible pour cette configuration.

## Dépannage

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

### Dépannage des pannes de R2 E1

Il s'agit des informations de dépannage relatives à cette configuration. Suivez ces instructions afin de faire le dépannage de votre configuration .

1. Vérifiez que le contrôleur E1 0 est actif. En cas de panne, vérifiez le tramage, le codage de ligne, la source de l'horloge, les alarmes, remplacez le câble, réinstallez la carte, etc. Utilisez le document [Personnalisation de R2 E1 avec la commande cas-custom](#) comme référence.
2. Si vous utilisez un AS5300, vérifiez que les DSP sont correctement installés avec la commande **show vfc slot number interface**.
3. Configurez la numérotation directe à l'arrivée (DID) sur l'homologue POTS (plain old phone service), de sorte que les chiffres reçus soient utilisés pour choisir un homologue sortant.
4. Spécifiez [cptone](#) (**cptone** est spécifique à votre pays) sur les ports vocaux. Une commande **cptonecountry** doit être configurée afin de correspondre à la commande **cas-custom country**.

Le paramètre `cptone` définit les tonalités de progression de l'appel pour un pays particulier, et plus important encore, définit le codage sur a-law ou u-law, qui dépend du pays. Le codage par défaut pour les États-Unis est u-law.

5. Associez les dispositions de signalisation de ligne et d'enregistrement à la configuration du commutateur.
6. Activez certains des **débogages** présentés dans ce document et étudiez les résultats.
7. Vérifiez la communication entre le routeur et le PBX ou le commutateur : La ligne est-elle saisie ? Le routeur reçoit-il/envoie-t-il des chiffres ? Déterminez quel côté efface l'appel. Si possible, utilisez les dernières versions du logiciel Cisco IOS disponibles sur Cisco.com.

## Commandes debug et show

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 aux [Informations importantes sur les commandes de débogage](#).

**Remarque :** Pour le logiciel Cisco IOS Version 12.0, utilisez ces **débogages** :

- **debug cas** - Pour la signalisation de ligne.
- **debug csm voice** - Pour la signalisation interregister.
- **debug vtsp all** - Afin que la sortie de tous les messages (chiffres) échangés entre le PBX et le routeur.

Pour la version du logiciel Cisco IOS 11.3, utilisez les commandes suivantes :

- **modem-mgmt csm debug-rbs** - Pour la signalisation de ligne (vous devez d'abord spécifier le **service interne** en mode de configuration.)
- **debug csm voice** - Pour la signalisation interregister.
- **debug vtsp all** - Afin que la sortie de tous les messages (chiffres) échangés entre le PBX et le routeur.

Pour les plates-formes AS5400 et AS5350, utilisez les débogages suivants :

- **debug sigsm r2** - Pour la signalisation inter-register
- **debug vtsp all** - Afin que la sortie de tous les messages (chiffres) échangés entre le PBX et le routeur.

## Exemple de sortie de débogage

Comme il existe trois configurations différentes précédemment illustrées dans ce document, voici trois **débogages** différents :

### R2 Numérique non obligatoire : Appel entrant vers 567

Afin de mieux comprendre cette sortie de **débogage**, référez-vous à [Théorie de signalisation E1 R2](#).

```
eefje#show debug
```

CAS:  
 Channel Associated Signaling debugging is on  
 CSM Voice:  
 Voice Call Switching Module debugging is on  
 Voice Telephony session debugging is on  
 Voice Telephony dsp debugging is on  
 Voice Telephony error debugging is on  
 eefje#  
 eefje#  
 eefje#  
 Jan 6 10:41:28.677: from NEAT(0): (0/0): **Rx SEIZURE** (ABCD=0001)  
 Jan 6 10:41:28.717: VDEV\_ALLOCATE: failed to allocate a device  
 Jan 6 10:41:28.717: VDEV\_ALLOCATE: 1/28 is allocated  
 Jan 6 10:41:28.721: csm\_vtsp\_init\_tdm (voice\_vdev=0x620BF874)  
 Jan 6 10:41:28.721: csm\_vtsp\_init\_tdm: dsprm\_tdm\_allocate: tdm slot 2,  
 dsprm 1, dsp 5, dsp\_channel 1  
 Jan 6 10:41:28.721: csm\_vtsp\_init\_tdm: dsprm\_tdm\_allocate: tdm stream 5,  
 channel 3, bank 1, bp\_channel 4, BP\_stream 255  
 Jan 6 10:41:28.721: CSM\_RX\_CAS\_EVENT\_FROM\_NEAT:(cid0018): EVENT\_CALL\_DIAL\_IN  
 at slot 2 and port 16  
 Jan 6 10:41:28.721: CSM\_PROC\_IDLE: CSM\_EVENT\_START\_DIGIT\_COLLECT at slot 2,  
 port 16  
 Jan 6 10:41:28.721: csm\_vtsp\_start\_digit\_collect (voice\_vdev=0x620BF874)  
 Jan 6 10:41:28.721: Enter csm\_connect\_pri\_vdev function  
 Jan 6 10:41:28.721: csm\_connect\_pri\_vdev:tdm\_allocate\_BP\_ts()call. BP TS allocated  
 at BP\_stream0, BP\_Ch28,vdev\_common 0x6 20BF8E4  
 Jan 6 10:41:28.721: to NEAT:(cid0018) EVENT\_CHANNEL\_LOCK for slot0 ctrlr0 chan0  
 Jan 6 10:41:28.721: vtsp\_do\_call\_setup\_ind  
 Jan 6 10:41:28.721: vtsp\_do\_call\_setup\_ind: Call ID=65681, guid=61FAF610  
 Jan 6 10:41:28.721: vtsp\_do\_call\_setup\_ind: type=0, under\_spec=0, name=, id0=0,  
 id1=0, id2=0, calling=, called=  
 Jan 6 10:41:28.721: vtsp\_do\_call\_setup\_ind: redirect DN = reason =  
 0vtsp\_open\_voice\_and\_set\_params  
 Jan 6 10:41:28.721: dsp\_close\_voice\_channel: [0:1:0] packet\_len=8 channel\_id  
 =8529 packet\_id=75  
 Jan 6 10:41:28.721: dsp\_open\_voice\_channel\_20: [0:1:0] packet\_Len=16 channel\_id  
 =8529 packet\_id=74 alaw\_ulaw\_select=1 associated\_signaling\_channel=0 time\_slot=0  
 serial\_port=0  
 Jan 6 10:41:28.721: dsp\_encap\_config\_20: [0:1:0] packet\_Len=24 channel\_id=8529  
 packet\_id=92 TransportProtocol 2 t\_sssrc=0x0 r\_sssrc=0x0 t\_vpxcc=0x0 r\_vpxcc=0x0  
 Jan 6 10:41:28.721: dsp\_set\_playout: [0:1:0] packet\_Len=18 channel\_id=8529  
 packet\_id=76 mode=1 initial=60 min=4 max=200 fax\_nom=300  
 Jan 6 10:41:28.721: dsp\_echo\_canceller\_control: [0:1:0] packet\_Len=10  
 channel\_id=8529 packet\_id=66 flags=0x0  
 Jan 6 10:41:28.721: dsp\_set\_gains: [0:1:0] packet\_Len=12 channel\_id=8529  
 packet\_id=91 in\_gain=0 out\_gain=0  
 Jan 6 10:41:28.721: dsp\_vad\_enable: [0:1:0] packet\_Len=10 channel\_id=8529  
 packet\_id=78 thresh=-38  
 Jan 6 10:41:28.721: dsp\_voice\_mode: [0:1:0] packet\_Len=24 channel\_id=8529  
 packet\_id=73 coding\_type=1 voice\_field\_size=80 V AD\_flag=0 echo\_length=64  
 comfort\_noise=1 inband\_detect=1 digit\_relay=2  
 AGC\_flag=0vtsp\_do\_r2\_start\_digit(): dsp\_dtmf\_mode()  
 dsp\_dtmf\_mode(VTSP\_TONE\_R2\_MF\_FORWARD\_MODE)  
 Jan 6 10:41:28.725: dsp\_dtmf\_mode: [0:1:0] packet\_Len=10 channel\_id=8529  
 packet\_id=65 dtmf\_or\_mf=1vtsp\_do\_r2\_start\_digit():fsm\_push(vtsp\_r2\_state\_table)  
 Jan 6 10:41:28.725: csm\_vtsp\_call\_setup\_resp (vdev\_info=0x620BF874,  
 vtsp\_cdb=0x621C5F3C)  
 Jan 6 10:41:28.725: csm\_vtsp\_call\_setup\_resp:vdev\_common BP TS allocatedat  
 BP\_stream0,BP\_Ch28  
 Jan 6 10:41:28.725: csm\_vtsp\_call\_setup\_resp:dst\_tdm\_chnl call. BP TS allocatedat  
 stream 5, chan 3,BP\_stream 255, BP\_ch 4  
 Jan 6 10:41:28.725: csm\_vtsp\_call\_setup\_resp:DST\_tdm\_chnl call. BP TS allocatedat  
 stream 5, chan 3,BP\_stream 0, BP\_ch 28  
 Jan 6 10:41:28.725: CSM\_PROC\_IC1\_COLLECT\_ADDR\_INFO: CSM\_EVENT\_MODEM\_OFFHOOK

(DNIS=, ANI=) at slot 2, port 16  
Jan 6 10:41:28.725: R2 Incoming Voice(2/16): DSX (E1 0:0): STATE: R2\_IN\_IDLE R2  
**Got Event R2\_START**  
Jan 6 10:41:28.821: CSM\_RX\_CAS\_EVENT\_FROM\_NEAT:(0018):EVENT\_START\_RX\_TONE at slot 2  
and port 16  
Jan 6 10:41:28.821: from NEAT(0): (0/0): **TX SEIZURE\_ACK** (ABCD=1101)  
!--- *Digit 5 is sent: Forward Signal Group I-5.* Jan 6 10:41:29.233: vtsp\_process\_dsp\_message:  
**MSG\_TX\_DTMF\_DIGIT\_BEGIN: digit=5,**  
rtp\_timestamp=0x0CA95D43 dc\_digit\_up  
Jan 6 10:41:29.233: csm\_vtsp\_digit\_ready\_up (vtsp\_cdb=0x621C5F3C) received digit (5)  
Jan 6 10:41:29.233: CSM voice (2/16): Rcvd Digit detected(5)  
Jan 6 10:41:29.233: R2 Incoming Voice(2/16): DSX (E1 0:0):  
**STATE: R2\_IN\_COLLECT\_DNIS R2**  
Got Event 5  
Jan 6 10:41:29.365: vtsp\_process\_dsp\_message: MSG\_TX\_DTMF\_DIGIT\_OFF: digit=5,  
duration=8321dc\_digit  
Jan 6 10:41:29.365: csm\_vtsp\_digit\_ready (vtsp\_cdb=0x621C5F3C) received digit (5)  
Jan 6 10:41:29.365: CSM voice (2/16): Rcvd Digit detected(5)  
Jan 6 10:41:29.365: R2 Incoming Voice(2/16): DSX (E1 0:0):  
**STATE: R2\_IN\_COLLECT\_DNIS R2**  
**Got Event R2\_TONE\_OFF**  
!--- *Digit 6 is sent: Forward Signal Group I-6.* Jan 6 10:41:29.593: vtsp\_process\_dsp\_message:  
**MSG\_TX\_DTMF\_DIGIT\_BEGIN: digit=6,**  
rtp\_timestamp=0x0CA95D43 dc\_digit\_up  
Jan 6 10:41:29.593: csm\_vtsp\_digit\_ready\_up (vtsp\_cdb=0x621C5F3C) received digit (6)  
Jan 6 10:41:29.593: CSM voice (2/16): Rcvd Digit detected(6)  
Jan 6 10:41:29.593: R2 Incoming Voice(2/16): DSX (E1 0:0):  
**STATE: R2\_IN\_COLLECT\_DNIS R2**  
Got Event 6  
Jan 6 10:41:29.725: vtsp\_process\_dsp\_message: MSG\_TX\_DTMF\_DIGIT\_OFF: digit=6,  
duration=8321dc\_digit  
Jan 6 10:41:29.725: csm\_vtsp\_digit\_ready (vtsp\_cdb=0x621C5F3C) received digit (6)  
Jan 6 10:41:29.725: CSM voice (2/16): Rcvd Digit detected(6)  
Jan 6 10:41:29.725: R2 Incoming Voice(2/16): DSX (E1 0:0):  
**STATE: R2\_IN\_COLLECT\_DNIS R2**  
**Got Event R2\_TONE\_OFF**  
!--- *Digit 7 is sent: Forward Signal Group I-7.* Jan 6 10:41:29.953: vtsp\_process\_dsp\_message:  
**MSG\_TX\_DTMF\_DIGIT\_BEGIN:**  
**digit=7, rtp\_timestamp=0x0CA95D43 dc\_digit\_up**  
Jan 6 10:41:29.953: csm\_vtsp\_digit\_ready\_up (vtsp\_cdb=0x621C5F3C)  
received digit (7)  
Jan 6 10:41:29.953: CSM voice (2/16): Rcvd Digit detected(7)  
Jan 6 10:41:29.953: R2 Incoming Voice(2/16): DSX (E1 0:0):  
**STATE: R2\_IN\_COLLECT\_DNIS R2**  
**Got Event 7**  
Jan 6 10:41:30.085: vtsp\_process\_dsp\_message: MSG\_TX\_DTMF\_DIGIT\_OFF:  
digit=7, duration=8321dc\_digit  
Jan 6 10:41:30.085: csm\_vtsp\_digit\_ready (vtsp\_cdb=0x621C5F3C) received digit (7)  
Jan 6 10:41:30.085: CSM voice (2/16): Rcvd Digit detected(7)  
Jan 6 10:41:30.085: R2 Incoming Voice(2/16): DSX (E1 0:0):  
**STATE: R2\_IN\_COLLECT\_DNIS R2**  
**Got Event R2\_TONE\_OFF**  
!--- *Timeout: 3 seconds (default timer - AS5300 assumes DNIS is finished).* Jan 6 10:41:32.953:  
R2 Incoming Voice(2/16): DSX (E1 0:0): STATE: R2\_IN\_COLLECT\_DNIS R2 **Got Event R2\_TONE\_TIMER**  
!--- *Send digit 6: Backward Signal Group B-6 (subscriber's line free-charge).* Jan 6  
10:41:32.953: vtsp\_r2\_generate\_digits: vdev\_common=0x620BF8E4, string=567dc\_dial()  
vtsp\_dial\_nopush **dsp\_dtmf\_dialing(): dial\_string = 6#**  
  
Jan 6 10:41:32.953: dsp\_dtmf\_dialing: [0:1:0] packet\_Len=36 channel\_id=8529  
packet\_id=90 string=6# digits=2, time\_on=150, time\_off=30  
Jan 6 10:41:32.953:& digit=e, components=2, freq\_of\_first=900,  
freq\_of\_second=780, amp\_of\_first=8192, amp\_of\_second=8192  
Jan 6 10:41:32.953: digit=o, components=2, freq\_of\_first=0,  
freq\_of\_second=0, amp\_of\_first=1, amp\_of\_second=1

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Jan 6 10:41:33.313: vtsp_process_dsp_message:  
MSG_TX_DIALING_DONE dc_dialing_done()  
Jan 6 10:41:33.313: R2 Incoming Voice(2/16): DSX (E1 0:0):  
STATE:R2_IN_ANSWER_PULSE R2  
Got Event R2_DIGITS_GENR2_ALERTING  
Jan 6 10:41:34.313: R2 Incoming Voice(2/16): DSX (E1 0:0):  
STATE: R2_IN_ANSWER_PULSE R2  
Got Event R2_TONE_TIMER  
Jan 6 10:41:34.313: R2_IN_IDLE:2 r2_in_connect called  
Jan 6 10:41:34.313: CSM_PROC_IC1_COLLECT_ADDR_INFO:  
  CSM_EVENT_ADDR_INFO_COLLECTED (DNIS=567, ANI=) at slot 2, port 16  
Jan 6 10:41:34.313: vtsp_tsp_call_accept_check (sdb=0x61B8F0E0, calling_number=  
  called_number=567): peer_tag=0  
Jan 6 10:41:34.313: VDEV_ALLOCATE: failed to allocate a device  
Jan 6 10:41:34.313: VDEV_ALLOCATE_ALMOST_READY: failed to allocate a non-idle modem  
Jan 6 10:41:34.313: VDEV_ALLOCATE: failed to allocate a device  
Jan 6 10:41:34.313: VDEV_ALLOCATE_ALMOST_READY: failed to allocate a non-idle modem  
Jan 6 10:41:34.313: VDEV_ALLOCATE: failed to allocate a device  
Jan 6 10:41:34.313: VDEV_ALLOCATE_ALMOST_READY: failed to allocate a non-idle modem  
Jan 6 10:41:34.313: CSM_PROC_IC3_WAIT_FOR_RES_RESP: CSM_EVENT_RESOURCE_OK at slot 2,  
  port 16  
Jan 6 10:41:34.313: vtsp_ic_switch : (voice_vdev= 0x620BF874)  
Jan 6 10:41:34.313: vtsp_tsp_call_switch_ind (cdb=0x621C5F3C, tsp_info=0x620BF874,  
  calling_number= called_number=567 redir ect_number=):  
  peer_tag=123dc_switch: fsm_pop()  
Jan 6 10:41:34.313: vtsp_do_call_setup_ind  
Jan 6 10:41:34.313: vtsp_do_call_setup_ind: Call ID=65683, guid=61FAF610  
Jan 6 10:41:34.313: vtsp_do_call_setup_ind: type=0, under_spec=0,  
  name=ab^Ix, id0=1, id1=0, id2=0, calling=123, called=567  
Jan 6 10:41:34.317: dsp_cp_tone_off: [] packet_Len=8 channel_id=8529 packet_id=71  
Jan 6 10:41:34.317: dsp_idle_mode: [] packet_Len=8 channel_id=8529 packet_id=68  
Jan 6 10:41:34.317: dsp_close_voice_channel: [] packet_Len=8 channel_id=8529  
  packet_id=75  
Jan 6 10:41:34.317: vtsp_timer_stop: 67475758  
Jan 6 10:41:34.317: csm_vtsp_call_setup_resp (vdev_info=0x620BF874,  
  vtsp_cdb=0x621C5F3C)  
Jan 6 10:41:34.317: csm_vtsp_call_setup_resp:vdev_common  
BP TS allocatedat BP_stream0,  
  BP_Ch28  
Jan 6 10:41:34.317: csm_vtsp_call_setup_resp:DST_tdm_chnl call. BP TS allocatedat  
  stream 5, chan 3,BP_stream 0, BP_ch 28  
Jan 6 10:41:34.317: csm_vtsp_call_setup_resp:DST_tdm_chnl call. BP TS allocatedat  
  stream 5, chan 3,BP_stream 0, BP_ch 28vt sp_open_voice_and_set_params  
Jan 6 10:41:34.317: dsp_close_voice_channel: [0:1 (54)] packet_Len=8 channel_id=8529  
  packet_id=75  
Jan 6 10:41:34.317: dsp_open_voice_channel_20: [0:1 (54)] packet_Len=16  
  channel_id=8529  
  packet_id=74 alaw_ulaw_select=1 associated_signaling_channel=0 time_slot=0  
  serial_port=0  
Jan 6 10:41:34.317: dsp_encap_config_20: [0:1 (54)] packet_Len=24 channel_id=8529  
  packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0 t_vpxcc=0x0 r_vpxcc=0x0  
Jan 6 10:41:34.317: dsp_set_playout: [0:1 (54)] packet_Len=18 channel_id=8529  
  packet_id=76 mode=1 initial=60 min=4 max=200 fax_nom=300  
Jan 6 10:41:34.317: dsp_echo canceller_control: [0:1 (54)] packet_Len=10  
  channel_id=8529  
  packet_id=66 flags=0x0  
Jan 6 10:41:34.317: dsp_set_gains: [0:1 (54)] packet_Len=12  
  channel_id=8529 packet_id=91  
  in_gain=0 out_gain=0  
Jan 6 10:41:34.317: dsp_vad_enable: [0:1 (54)] packet_Len=10  
  channel_id=8529 packet_id=78  
  thresh=-38act_proceeding  
Jan 6 10:41:34.321: csm_vtsp_call_proceeding:DST_tdm_chnl call.  
BP TS allocatedstream 5,
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chan 3,BP_stream 0, BP_ch 28act_alert
Jan 6 10:41:34.345: vtsp_ring_noan_timer_start: 67475761
Jan 6 10:41:34.345: csm_vtsp_call_alert (vtsp_cdb=0x621C5F3C)act_bridge act_caps_ind
Jan 6 10:41:34.589: act_caps_ind:Encap 1, Vad 2, Codec 0x4, CodecBytes 20,
    FaxRate 2, FaxBytes 20 SignalType 0
    DtmfRelay 1, Modem 1act_caps_ack
Jan 6 10:41:34.589: dsp_idle_mode: [0:1 (54)] packet_Len=8
channel_id=8529 packet_id=68
Jan 6 10:41:34.589: act_caps_ack: codec = 15, ret = 1
Jan 6 10:41:34.589: dsp_cp_tone_off: [0:1 (54)] packet_Len=8 channel_id=8529
    packet_id=71
Jan 6 10:41:34.589: dsp_idle_mode: [0:1 (54)] packet_Len=8
channel_id=8529 packet_id=68
Jan 6 10:41:34.589: dsp_encap_config_20: [0:1 (54)] packet_Len=24 channel_id=8529
    packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0 t_vpxcc=0x0 r_vpxcc=0x0
Jan 6 10:41:34.589: dsp_voice_mode: [0:1 (54)] packet_Len=24 channel_id=8529
    packet_id=73 coding_type=20 voice_field_size=20 VAD_flag=1 echo_length=64
    comfort_noise=1 inband_detect=1 digit_relay=2 AGC_flag=0act_alert_connect
Jan 6 10:41:36.857: vtsp_ring_noan_timer_stop: 67476012
Jan 6 10:41:36.857: dsp_cp_tone_off: [0:1 (54)] packet_Len=8 channel_id=8529
    packet_id=71
Jan 6 10:41:36.857: csm_vtsp_call_connect (vtsp_cdb=0x621C5F3C,
voice_vdev=0x620BF874)
Jan 6 10:41:36.857: CSM_IC5_WAIT_FOR_SWITCH_OVER: CSM_EVENT_MODEM_OFFHOOK
    at slot 2, port 16
Jan 6 10:41:36.917: CSM_RX_CAS_EVENT_FROM_NEAT:(0018): EVENT_CHANNEL_CONNECTED
    at slot 2 and port 16
Jan 6 10:41:36.917: CSM_PROC_IC6_WAIT_FOR_CONNECT: CSM_EVENT_DSX0_CONNECTED
    at slot 2, port 16
Jan 6 10:41:36.921: from NEAT(0): (0/0): TX ANSWERED(ABCD=0101)
eefje#

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## Semi-commandé numérique R2 : Appel entrant vers 567

Afin de mieux comprendre cette **sortie de débogage**, référez-vous à [Théorie de signalisation E1 R2.](#)

```

eefje#show debug
CAS:
    Channel Associated Signaling debugging is on
CSM Voice:
    Voice Call Switching Module debugging is on
    Voice Telephony session debugging is on
    Voice Telephony dsp debugging is on
    Voice Telephony error debugging is on
eefje#
eefje#
eefje#
Jan 6 09:53:42.389: from NEAT(0): (0/2): Rx SEIZURE(ABCD=0001)
Jan 6 09:53:42.433: VDEV_ALLOCATE: failed to allocate a device
Jan 6 09:53:42.433: VDEV_ALLOCATE: 1/27 is allocated
Jan 6 09:53:42.433: csm_vtsp_init_tdm (voice_vdev=0x620BF320)
Jan 6 09:53:42.433: csm_vtsp_init_tdm: dsprm_tdm_allocate: tdm slot 2, dspm 1,
    dsp 4, dsp_channel 4
Jan 6 09:53:42.433: csm_vtsp_init_tdm: dsprm_tdm_allocate: tdm stream 7, channel 0,
    bank 4, BP_channel 3, BP_stream 255
Jan 6 09:53:42.433: CSM_RX_CAS_EVENT_FROM_NEAT:(cid0017): EVENT_CALL_DIAL_IN
    at slot 2 and port 15
Jan 6 09:53:42.433: CSM_PROC_IDLE: CSM_EVENT_START_DIGIT_COLLECT
    at slot 2, port 15
Jan 6 09:53:42.433: csm_vtsp_start_digit_collect (voice_vdev=0x620BF320)
Jan 6 09:53:42.433: Enter csm_connect_pri_vdev function

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Jan 6 09:53:42.433: csm_connect_pri_vdev:tdm_allocate_BP_Ts()call. BP TS allocated
at BP_stream0, BP_Ch27,vdev_common 0x6 20BF390
Jan 6 09:53:42.433: to NEAT:(cid0017) EVENT_CHANNEL_LOCK for slot0 ctrlr0 chan2
Jan 6 09:53:42.433: vtsp_do_call_setup_ind
Jan 6 09:53:42.433: vtsp_do_call_setup_ind: Call ID=65675, guid=61FAF610
Jan 6 09:53:42.433: vtsp_do_call_setup_ind: type=0, under_spec=0, name=, id0=0,
id1=0, id2=0, calling=, called=
Jan 6 09:53:42.433: vtsp_do_call_setup_ind: redirect DN = reason =
0vtsp_open_voice_and_set_params
Jan 6 09:53:42.433: dsp_close_voice_channel: [0:1:2] packet_Len=8 channel_id=8516
packet_id=75
Jan 6 09:53:42.433: dsp_open_voice_channel_20: [0:1:2] packet_Len=16
channel_id=8516
packet_id=74 alaw_ulaw_select=1 associated_signaling_channel=0
time_slot=1 serial_port=1
Jan 6 09:53:42.433: dsp_encap_config_20: [0:1:2] packet_Len=24 channel_id=8516
packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0 t_vpxcc=0x0 r_vpxcc=0x0
Jan 6 09:53:42.433: dsp_set_playout: [0:1:2] packet_Len=18 channel_id=8516
packet_id=76 mode=1 initial=60 min=4 max=200 fax_nom=300
Jan 6 09:53:42.433: dsp_echo_canceller_control: [0:1:2]
packet_Len=10 channel_id=8516
packet_id=66 flags=0x0
Jan 6 09:53:42.437: dsp_set_gains:[0:1:2] packet_Len=12
channel_id=8516 packet_id=91
in_gain=0 out_gain=0
Jan 6 09:53:42.437: dsp_vad_enable: [0:1:2] packet_Len=10 channel_id=8516
packet_id=78 thresh=-38
Jan 6 09:53:42.437: dsp_voice_mode: [0:1:2] packet_Len=24 channel_id=8516
packet_id=73 coding_type=1 voice_field_size=80 VAD_flag=0 echo_length=64
comfort_noise=1 inband_detect=1 digit_relay=2 AGC_flag=0vtsp_do_r2_start_digit():
dsp_dtmf_mode() dsp_dtmf_mode(VTSP_TONE_R2_MF_FORWARD_MODE)
Jan 6 09:53:42.437: dsp_dtmf_mode: [0:1:2] packet_Len=10 channel_id=8516
packet_id=65 dtmf_or_mf=1vtsp_do_r2_start_digit(): fsm_push(vtsp_r2_state_table)
Jan 6 09:53:42.437: csm_vtsp_call_setup_resp (vdev_info=0x620BF320,
vtsp_cdb=0x621C5F3C)
Jan 6 09:53:42.437: csm_vtsp_call_setup_resp:vdev_common BP
TS allocatedat BP_stream0,
BP_Ch27
Jan 6 09:53:42.437: csm_vtsp_call_setup_resp:DST_tdm_chnl call. BP TS allocatedat
stream 7, chan 0,BP_stream 255, BP_ch 3
Jan 6 09:53:42.437: csm_vtsp_call_setup_resp:DST_tdm_chnl call. BP TS allocatedat
stream 7, chan 0,BP_stream 0, BP_ch 27
Jan 6 09:53:42.437: CSM_PROC_IC1_COLLECT_ADDR_INFO: CSM_EVENT_MODEM_OFFHOOK
(DNIS=, ANI=) at slot 2, port 15
Jan 6 09:53:42.437: R2 Incoming Voice(2/15): DSX (E1 0:2): STATE:R2_IN_IDLE R2
Got Event R2_START
Jan 6 09:53:42.533: CSM_RX_CAS_EVENT_FROM_NEAT:(0017):EVENT_START_RX_TONE
at slot 2 and port 15
Jan 6 09:53:42.533: from NEAT(0): (0/2): TX SEIZURE_ACK (ABCD=1101)
!--- Digit 5 is sent: Forward Signal Group I-5. Jan 6 09:53:42.641: vtsp_process_dsp_message:
MSG_TX_DTMF_DIGIT_BEGIN: digit=5, rtp_timestamp=0x9330B42B dc_digit_up Jan 6 09:53:42.641:
csm_vtsp_digit_ready_up (vtsp_cdb=0x621C5F3C) received digit (5) Jan 6 09:53:42.641: CSM voice
(2/15): Rcvd Digit detected(5) Jan 6 09:53:42.641: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2
Got Event 5
!--- Digit 1 sent (pulse): Backward Signal Group A-1 (Send next digit) !--- "#" this indicates
that it is a pulse). Jan 6 09:53:42.641: vtsp_r2_generate_digits: vdev_common=0x620BF390,
string=5dc_dial() vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = 1#

Jan 6 09:53:42.641: dsp_dtmf_dialing: [0:1:2] packet_Len=36 channel_id=8516
packet_id=90 string=1# digits=2, time_on=150, time_off=30
Jan 6 09:53:42.641: digit=`, components=2, freq_of_first=1020,
freq_of_second=1140,
amp_of_first=8192, amp_of_second=8192

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Jan 6 09:53:42.641:    digit=o, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
Jan 6 09:53:42.741: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=5,
duration=8291dc_digit
Jan 6 09:53:42.741: csm_vtsp_digit_ready (vtsp_cdb=0x621C5F3C) received digit (5)
Jan 6 09:53:42.741: CSM voice (2/15): Rcvd Digit detected(5)
Jan 6 09:53:42.741: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2
Got Event R2_TONE_OFF
!--- Digit 6 is sent: Forward Signal Group I. Jan 6 09:53:42.881: vtsp_process_dsp_message:
MSG_TX_DTMF_DIGIT_BEGIN: digit=6, rtp_timestamp=0x9330B42B dc_digit_up Jan 6 09:53:42.881:
csm_vtsp_digit_ready_up (vtsp_cdb=0x621C5F3C) received digit (6) Jan 6 09:53:42.881: CSM voice
(2/15): Rcvd Digit detected(6) Jan 6 09:53:42.881: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2 Got Event 6
!--- Digit 1 sent (pulse): Backward Signal Group A-1. (Send next digit.) Jan 6 09:53:42.881:
vtsp_r2_generate_digits: vdev_common=0x620BF390, string=56dc_dial() vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 1#

Jan 6 09:53:42.881: dsp_dtmf_dialing: [0:1:2] packet_Len=36 channel_id=8516
packet_id=90 string=1# digits=2, time_on=150, time_off=30
Jan 6 09:53:42.881:    digit=`, components=2, freq_of_first=1020,
freq_of_second=1140,
amp_of_first=8192, amp_of_second=8192
Jan 6 09:53:42.881:    digit=o, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
Jan 6 09:53:42.981: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=6,
duration=8291dc_digit
Jan 6 09:53:42.981: csm_vtsp_digit_ready (vtsp_cdb=0x621C5F3C) received digit (6)
Jan 6 09:53:42.981: CSM voice (2/15): Rcvd Digit detected(6)
Jan 6 09:53:42.981: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2
Got Event R2_TONE_OFF
!--- Digit 7 is sent: Forward Signal Group I-7. Jan 6 09:53:43.121: vtsp_process_dsp_message:
MSG_TX_DTMF_DIGIT_BEGIN:
digit=7, rtp_timestamp=0x9330B42B dc_digit_up
Jan 6 09:53:43.121: csm_vtsp_digit_ready_up (vtsp_cdb=0x621C5F3C) received digit (7)
Jan 6 09:53:43.121: CSM voice (2/15): Rcvd Digit detected(7)
Jan 6 09:53:43.121: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2
Got Event 7
!--- Send digit 1 (pulse): Backward Signal Group A-1. Jan 6 09:53:43.121:
vtsp_r2_generate_digits: vdev_common=0x620BF390, string=567dc_dial() vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 1#

Jan 6 09:53:43.121: dsp_dtmf_dialing: [0:1:2] packet_Len=36 channel_id=8516
packet_id=90 string=1# digits=2, time_on=150, time_off=30
Jan 6 09:53:43.121:    digit=`, components=2, freq_of_first=1020,
freq_of_second=1140,
amp_of_first=8192, amp_of_second=8192
Jan 6 09:53:43.121:    digit=o, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
Jan 6 09:53:43.221: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=7,
duration=8291dc_digit
Jan 6 09:53:43.221: csm_vtsp_digit_ready (vtsp_cdb=0x621C5F3C) received digit (7)
Jan 6 09:53:43.221: CSM voice (2/15): Rcvd Digit detected(7)
Jan 6 09:53:43.221: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2
Got Event R2_TONE_OFF
Jan 6 09:53:43.489: vtsp_process_dsp_message: MSG_TX_DIALING_DONEdc_dialing_done()
!--- Timeout is 3 seconds. Jan 6 09:53:46.121: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_COLLECT_DNIS R2
Got Event R2_TONE_TIMER
!--- Digit 3 sent(pulse): Backward Signal Group A-3. !--- (Address-complete, changeover to
reception of Group-B signals). Jan 6 09:53:46.121: vtsp_r2_generate_digits:

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vdev_common=0x620BF390, string=567dc_dial() vtsp_dial_nopush dsp_dtmf_dialing(): dial_string =
3# Jan 6 09:53:46.121: dsp_dtmf_dialing: [0:1:2] packet_Len=36 channel_id=8516 packet_id=90
string=3# digits=2, time_on=150, time_off=30 Jan 6 09:53:46.121: digit=b, components=2,
freq_of_first=1020, freq_of_second=900, amp_of_first=8192, amp_of_second=8192 Jan 6
09:53:46.121: digit=o, components=2, freq_of_first=0, freq_of_second=0, amp_of_first=1,
amp_of_second=1 !--- Digit 1 is sent: Forward Signal Group II-1 !--- (subscriber without priority). Jan 6 09:53:46.361: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN:
digit=1, rtp_timestamp=0x9330B42B dc_digit_up
Jan 6 09:53:46.361: csm_vtsp_digit_ready_up (vtsp_cdb=0x621C5F3C)
received digit (1)
Jan 6 09:53:46.361: CSM voice (2/15): Rcvd Digit detected(1)
Jan 6 09:53:46.361: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_CATEGORY R2
Got Event 1
Jan 6 09:53:46.361: r2_comp_category:R2_ALERTING
!--- Digit 6 sent (pulse): Backward Signal Group B-6 !--- (the subscriber line free of charge).
Jan 6 09:53:46.361: vtsp_r2_generate_digits: vdev_common=0x620BF390, string=567dc_dial()
vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = 6#

Jan 6 09:53:46.361: dsp_dtmf_dialing: [0:1:2] packet_Len=36 channel_id=8516
packet_id=90 string=6# digits=2, time_on=150, time_off=30
Jan 6 09:53:46.361: digit=e, components=2, freq_of_first=900,
freq_of_second=780,
amp_of_first=8192, amp_of_second=8192
Jan 6 09:53:46.361: digit=o, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
Jan 6 09:53:46.461: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF:digit=1,
duration=8291dc_digit
Jan 6 09:53:46.461: csm_vtsp_digit_ready (vtsp_cdb=0x621C5F3C)received digit (1)
Jan 6 09:53:46.461: CSM voice (2/15): Rcvd Digit detected(1)
Jan 6 09:53:46.461: R2 Incoming Voice(2/15): DSX (E1 0:2): STATE:R2_IN_COMPLETE R2
Got Event R2_TONE_OFF
Jan 6 09:53:46.729: vtsp_process_dsp_message: MSG_TX_DIALING_DONEdc_dialing_done()
Jan 6 09:53:47.461: R2 Incoming Voice(2/15): DSX (E1 0:2):
STATE:R2_IN_WAIT_GUARD R2
Got Event R2_TONE_TIMER
Jan 6 09:53:47.461: R2_IN_IDLE:2 r2_in_connect called
Jan 6 09:53:47.461: CSM_PROC_IC1_COLLECT_ADDR_INFO: CSM_EVENT_ADDR_INFO_COLLECTED
(DNIS=567, ANI=) at slot 2, port 15
Jan 6 09:53:47.461: vtsp_tsp_call_accept_check (sdb=0x61B8F0E0,calling_number=
called_number=567): peer_tag=0
Jan 6 09:53:47.461: VDEV_ALLOCATE: failed to allocate a device
Jan 6 09:53:47.461: VDEV_ALLOCATE_ALMOST_READY: failed to allocate a non-idle modem
Jan 6 09:53:47.461: VDEV_ALLOCATE: failed to allocate a device
Jan 6 09:53:47.461: VDEV_ALLOCATE_ALMOST_READY: failed to allocate a non-idle modem
Jan 6 09:53:47.461: VDEV_ALLOCATE: failed to allocate a device
Jan 6 09:53:47.461: VDEV_ALLOCATE_ALMOST_READY: failed to allocate a non-idle modem
Jan 6 09:53:47.461: CSM_PROC_IC3_WAIT_FOR_RES_RESP: CSM_EVENT_RESOURCE_OK at slot 2,
port 15
Jan 6 09:53:47.461: vtsp_IC_switch : (voice_vdev= 0x620BF320)
Jan 6 09:53:47.461: vtsp_tsp_call_switch_ind (cdb=0x621C5F3C,tsp_info=0x620BF320,
calling_number= called_number=567 redirect_number=):
peer_tag=123dc_switch: fsm_pop()
Jan 6 09:53:47.461: vtsp_do_call_setup_ind
Jan 6 09:53:47.461: vtsp_do_call_setup_ind: Call ID=65677, guid=61FAF610
Jan 6 09:53:47.461: vtsp_do_call_setup_ind: type=0, under_spec=0, name=AB^Lo, id0=3,
id1=0, id2=0, calling=123, called=567
Jan 6 09:53:47.465: dsp_cp_tone_off: [] packet_Len=8 channel_id=8516 packet_id=71
Jan 6 09:53:47.465: dsp_idle_mode: [] packet_Len=8 channel_id=8516 packet_id=68
Jan 6 09:53:47.465: dsp_close_voice_channel: [] packet_Len=8 channel_id=8516
packet_id=75
Jan 6 09:53:47.465: vtsp_timer_stop: 67189073
Jan 6 09:53:47.465: csm_vtsp_call_setup_resp (vdev_info=0x620BF320,
vtsp_cdb=0x621C5F3C)

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Jan 6 09:53:47.465: csm_vtsp_call_setup_resp:vdev_common
BP TS allocatedat BP_stream0,
BP_Ch27
Jan 6 09:53:47.465: csm_vtsp_call_setup_resp:DST_tdm_chnl call. BP TS allocatedat
stream 7, chan 0,BP_stream 0, BP_ch 27
Jan 6 09:53:47.465: csm_vtsp_call_setup_resp:DST_tdm_chnl call. BP TS allocatedat
stream 7, chan 0,BP_stream 0, BP_ch 27vtsp_open_voice_and_set_params
Jan 6 09:53:47.465: dsp_close_voice_channel: [0:1 (52)] packet_Len=8 channel_id=8516
packet_id=75
Jan 6 09:53:47.465: dsp_open_voice_channel_20: [0:1 (52)]
packet_Len=16 channel_id=8516
packet_id=74 alaw_ulaw_select=1 associated_signaling_channel=0
time_slot=1 serial_port=1
Jan 6 09:53:47.465: dsp_encap_config_20: [0:1 (52)] packet_Len=24
channel_id=8516
packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0 t_vpxcc=0x0 r_vpxcc=0x0
Jan 6 09:53:47.465: dsp_set_playout: [0:1 (52)] packet_Len=18 channel_id=8516
packet_id=76 mode=1 initial=60 min=4 max=200 fax_nom=300
Jan 6 09:53:47.465: dsp_echo_canceller_control: [0:1 (52)] packet_Len=10
channel_id=8516
packet_id=66 flags=0x0
Jan 6 09:53:47.465: dsp_set_gains: [0:1 (52)] packet_Len=12 channel_id=8516
packet_id=91 in_gain=0 out_gain=0
Jan 6 09:53:47.465: dsp_vad_enable: [0:1 (52)] packet_Len=10 channel_id=8516
packet_id=78 thresh=-38act_proceeding
Jan 6 09:53:47.469: csm_vtsp_call_proceeding:DST_tdm_chnl call. BP TS
allocatedstream 7,
chan 0,BP_stream 0, BP_ch 27act_alert
Jan 6 09:53:47.493: vtsp_ring_noan_timer_start: 67189076
Jan 6 09:53:47.493: csm_vtsp_call_alert (vtsp_cdb=0x621C5F3C)
act_bridge act_caps_ind
Jan 6 09:53:47.737: act_caps_ind:Encap 1, Vad 2, Codec 0x4, CodecBytes 20,
FaxRate 2, FaxBytes 20 SignalType 0
DtmfRelay 1, Modem 1act_caps_ack
Jan 6 09:53:47.737: dsp_idle_mode: [0:1 (52)] packet_Len=8 channel_id=8516
packet_id=68
Jan 6 09:53:47.737: act_caps_ack: codec = 15, ret = 1
Jan 6 09:53:47.737: dsp_cp_tone_off: [0:1 (52)] packet_Len=8 channel_id=8516
packet_id=71
Jan 6 09:53:47.737: dsp_idle_mode: [0:1 (52)] packet_Len=8 channel_id=8516
packet_id=68
Jan 6 09:53:47.737: dsp_encap_config_20: [0:1 (52)] packet_Len=24 channel_id=8516
packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0 t_vpxcc=0x0 r_vpxcc=0x0
Jan 6 09:53:47.737: dsp_voice_mode: [0:1 (52)] packet_Len=24 channel_id=8516
packet_id=73 coding_type=20 voice_field_size= 20 VAD_flag=1 echo_length=64
comfort_noise=1 inband_detect=1 digit_relay=2 AGC_flag=0act_alert_connect
Jan 6 09:53:49.461: vtsp_ring_noan_timer_stop: 67189273
Jan 6 09:53:49.461: dsp_cp_tone_off: [0:1 (52)] packet_Len=8 channel_id=8516
packet_id=71
Jan 6 09:53:49.461: csm_vtsp_call_connect (vtsp_cdb=0x621C5F3C,
voice_vdev=0x620BF320)
Jan 6 09:53:49.461: CSM_IC5_WAIT_FOR_SWITCH_OVER: CSM_EVENT_MODEM_OFFHOOK
at slot 2, port 15
Jan 6 09:53:49.617: CSM_RX_CAS_EVENT_FROM_NEAT(0017): EVENT_CHANNEL_CONNECTED
at slot 2 and port 15
Jan 6 09:53:49.617: CSM_PROC_IC6_WAIT_FOR_CONNECT: CSM_EVENT_DSX0_CONNECTED
at slot 2, port 15
Jan 6 09:53:49.621: from NEAT(0): (0/2): TX ANSWERED(ABCD=0101)
eefje#
eefje#

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[ANI numérique obligatoire de R2 : Appel entrant vers 567](#)

Afin de mieux comprendre cette sortie de **débogage**, référez-vous à [Théorie de signalisation E1 R2](#).

```
eefje#debug csm voice
Voice Call Switching Module debugging is on
eefje#debug cas
Channel Associated Signaling debugging is on
Jan 7 10:00:02.907: from NEAT(0): debug-cas is on
Jan 7 10:00:02.907: from NEAT(0): special debug-cas is offg vtsp all
Voice telephony call control all debugging is on
eefje#
eefje#
Jan 7 10:00:23.883: from NEAT(0): (0/8): Rx SEIZURE (ABCD=0001)
Jan 7 10:00:23.927: VDEV_ALLOCATE: failed to allocate a device
Jan 7 10:00:23.927: VDEV_ALLOCATE: 1/2 is allocated
Jan 7 10:00:23.927: csm_vtsp_init_tdm (voice_vdev=0x61F19688)
Jan 7 10:00:23.927: csm_vtsp_init_tdm: dsprm_tdm_allocate: tdm slot 1,
dspm 3, dsp 4,
dsp_channel 1
Jan 7 10:00:23.927: csm_vtsp_init_tdm: dsprm_tdm_allocate: tdm stream 5,
channel 13,
bank 0, BP_channel 15, BP_stream 255
Jan 7 10:00:23.927: CSM_RX_CAS_EVENT_FROM_NEAT:(cid0007):
EVENT_CALL_DIAL_IN at slot 1
and port 60
Jan 7 10:00:23.927: CSM_PROC_IDLE: CSM_EVENT_START_DIGIT_COLLECT at slot 1, port 60
Jan 7 10:00:23.927: csm_vtsp_start_digit_collect (voice_vdev=0x61F19688)
Jan 7 10:00:23.927: Enter csm_connect_pri_vdev function
Jan 7 10:00:23.927: csm_connect_pri_vdev:tdm_allocate_BP_Ts() call. BP
TS allocated at BP_stream0, BP_Ch8,vdev_common 0x6205E5F8
Jan 7 10:00:23.927: to NEAT:(cid0007) EVENT_CHANNEL_LOCK for slot0 ctrlr0 chan8
Jan 7 10:00:23.927: vtsp_do_call_setup_ind
Jan 7 10:00:23.927: vtsp_do_call_setup_ind: Call ID=65579, guid=62031A88
Jan 7 10:00:23.927: vtsp_do_call_setup_ind: type=0, under_spec=0,
name=, id0=0, id1=0,id2=0, calling=, called=
Jan 7 10:00:23.927: vtsp_do_call_setup_ind: redirect DN = reason =
0vtsp_do_r2_start_digit(): fsm_push(vtsp_r2_state_table)

Jan 7 10:00:23.927: csm_vtsp_call_setup_resp (vdev_info=0x61F19688,
vtsp_cdb=0x61B5BFFF8)
Jan 7 10:00:23.927: csm_vtsp_call_setup_resp:vdev_common
BP TS allocatedat BP_stream0,
BP_Ch8
Jan 7 10:00:23.927: csm_vtsp_call_setup_resp:DST_tdm_chnl call.
BP TS allocatedat stream
5, chan 13,BP_stream 255, BP_ch 15
Jan 7 10:00:23.927: csm_vtsp_call_setup_resp:DST_tdm_chnl call.
BP TS allocatedat stream
5, chan 13,BP_stream 0, BP_ch 8
Jan 7 10:00:23.927: CSM_PROC_IC1_COLLECT_ADDR_INFO: CSM_EVENT_MODEM_OFFHOOK
(DNIS=, ANI=) at slot 1, port 60

Jan 7 10:00:23.931: R2 Incoming Voice(1/60): DSX (E1 0:8): STATE: R2_IN_IDLE
R2 Got Event R2_START
Jan 7 10:00:24.027: CSM_RX_CAS_EVENT_FROM_NEAT:(0007): EVENT_START_RX_TONE
at slot 1 and port 60
Jan 7 10:00:24.027: from NEAT(0): (0/8): TX SEIZURE_ACK
(ABCD=1101)dc_init_dsp
vtsp_open_voice_and_set_params
Jan 7 10:00:24.151: dsp_close_voice_channel: [0:1:8] packet_Len=8 channel_id=4929
packet_id=75
Jan 7 10:00:24.151: dsp_open_voice_channel_20: [0:1:8] packet_Len=16
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channel_id=4929
packet_id=74 alaw_ulaw_select=1 associated_signaling_channel=0
time_slot=0 serial_port=0
Jan 7 10:00:24.151: dsp_encap_config_20: [0:1:8] packet_Len=24 channel_id=4929
packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0 t_vpxcc=0x0 r_vpxcc=0x0
Jan 7 10:00:24.151: dsp_set_playout: [0:1:8] packet_Len=18 channel_id=4929
packet_id=76 mode=1 initial=60 min=4 max=200 fax_nom=300
Jan 7 10:00:24.151: dsp_echo_canceller_control: [0:1:8]
packet_Len=10 channel_id=4929
packet_id=66 flags=0x0
Jan 7 10:00:24.151: dsp_set_gains: [0:1:8] packet_Len=12
channel_id=4929 packet_id=91
in_gain=0 out_gain=0
Jan 7 10:00:24.151: dsp_vad_enable: [0:1:8] packet_Len=10
channel_id=4929 packet_id=78
thresh=-38
Jan 7 10:00:24.151: dsp_voice_mode: [0:1:8] packet_Len=24
channel_id=4929 packet_id=73
coding_type=1 voice_field_size=80 VAD_flag=0 echo_length=64
comfort_noise=1
inband_detect=1 digit_relay=2 AGC_flag=0dsp_dtmf_mode
(VTSP_TONE_R2_MF_FORWARD_MODE)

Jan 7 10:00:24.151: dsp_dtmf_mode: [0:1:8] packet_Len=10 channel_id=4929
packet_id=65dtmf_or_mf=1
!---- Digit 5 is sent: Forward Signal Group I-5 (First DNIS digit). Jan 7 10:00:24.203:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN: digit=5,
rtp_timestamp=0x04030000 dc_digit_up
Jan 7 10:00:24.203: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFF8)received digit (5)
Jan 7 10:00:24.203: CSM voice (1/60): Rcvd Digit detected(5)
Jan 7 10:00:24.203: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_PRE_CALLERID R2
Got Event 5
!---- Send Backward Signal Group A-5 (caller category request). Jan 7 10:00:24.203:
vtsp_r2_generate_digits: vdev_common=0x6205E5F8, string=5dc_dial()vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 5
Jan 7 10:00:24.203: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929packet_id=90
string=5 digits=1, time_on=65435, time_off=30
Jan 7 10:00:24.203: digit=, components=2, freq_of_first=1020,
freq_of_second=780,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:24.303: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF:digit=5,
duration=30dc_digit
Jan 7 10:00:24.303: csm_vtsp_digit_ready (vtsp_cdb=0x61B5BFF8) received digit (5)
Jan 7 10:00:24.303: CSM voice (1/60): Rcvd Digit detected(5)
Jan 7 10:00:24.303: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2
Got Event R2_TONE_OFF

Jan 7 10:00:24.303: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=5dc_dial()
vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = #
Jan 7 10:00:24.303: dsp_dtmf_dialing: [0:1:8] packet_Len=24 channel_id=4929
packet_id=90 string=# digits=1, time_on=150, time_off=30
Jan 7 10:00:24.303: digit=, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
!---- Caller Category Forward Signal Group II-1 is sent. Jan 7 10:00:24.403:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN: digit=1,
rtp_timestamp=0x001E0010 dc_digit_up
Jan 7 10:00:24.403: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFF8)received
digit (1)
Jan 7 10:00:24.403: CSM voice (1/60): Rcvd Digit detected(1)
Jan 7 10:00:24.403: R2 Incoming Voice(1/60): DSX (E1 0:8): STATE:R2_IN_CALLERID R2

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Got Event 1
!---- Send Backward Signal Group A-5 (Caller ID request). Jan 7 10:00:24.403:
vtsp_r2_generate_digits: vdev_common=0x6205E5F8, string=5dc_dial() vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 5
Jan 7 10:00:24.403: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=5 digits=1, time_on=65435, time_off=30
Jan 7 10:00:24.403: digit=, components=2, freq_of_first=1020, freq_of_second=780,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:24.503: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=1,
duration=30dc_digit
Jan 7 10:00:24.503: csm_vtsp_digit_ready (vtsp_cdb=0x61B5BFFF) received digit (1)
Jan 7 10:00:24.503: CSM voice (1/60): Rcvd Digit detected(1)
Jan 7 10:00:24.503: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2
Got Event R2_TONE_OFF
Jan 7 10:00:24.503: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=5dc_dial()
vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = #
Jan 7 10:00:24.503: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=# digits=1, time_on=150, time_off=30
Jan 7 10:00:24.503: digit=, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
!---- First ANI digit is sent: Forward Signal Group I-1. Jan 7 10:00:24.603:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN:
digit=1, rtp_timestamp=0x001E0010 dc_digit_up
Jan 7 10:00:24.603: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFFF) received digit (1)
Jan 7 10:00:24.603: CSM voice (1/60): Rcvd Digit detected(1)
Jan 7 10:00:24.603: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2
Got Event 1
!---- Send Backward Signal Group A-5 (Caller ID request). Jan 7 10:00:24.603:
vtsp_r2_generate_digits: vdev_common=0x6205E5F8, string=5dc_dial() vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 5

Jan 7 10:00:24.603: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=5 digits=1, time_on=65435, time_off=30
Jan 7 10:00:24.603: digit=, components=2, freq_of_first=1020,
freq_of_second=780,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:24.703: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=1,
duration=30dc_digit
Jan 7 10:00:24.703: csm_vtsp_digit_ready (vtsp_cdb=0x61B5BFFF) received digit (1)
Jan 7 10:00:24.703: CSM voice (1/60): Rcvd Digit detected(1)
Jan 7 10:00:24.703: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2
Got Event R2_TONE_OFF
Jan 7 10:00:24.703: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=5dc_dial() vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = #
Jan 7 10:00:24.703: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=# digits=1, time_on=150, time_off=30
Jan 7 10:00:24.703: digit=, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
!---- Second ANI digit is sent: Forward Signal Group I-2. Jan 7 10:00:24.803:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN:digit=2,
rtp_timestamp=0x001E0010 dc_digit_up
Jan 7 10:00:24.803: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFFF)
received digit (2)
Jan 7 10:00:24.803: CSM voice (1/60): Rcvd Digit detected(2)
Jan 7 10:00:24.803: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2

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Got Event 2
!---- Send Backward Signal Group A-5 (Caller ID request). Jan 7 10:00:24.803:
vtsp_r2_generate_digits: vdev_common=0x6205E5F8, string=5dc_dial()vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 5

Jan 7 10:00:24.803: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=5 digits=1, time_on=65435, time_off=30
Jan 7 10:00:24.803: digit=, components=2, freq_of_first=1020,
freq_of_second=780,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:24.903: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=2,
duration=30dc_digit
Jan 7 10:00:24.903: csm_vtsp_digit_ready (vtsp_cdb=0x61B5BFF8) received digit (2)
Jan 7 10:00:24.903: CSM voice (1/60): Rcvd Digit detected(2)
Jan 7 10:00:24.903: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID
R2 Got Event R2_TONE_OFF
Jan 7 10:00:24.903: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=5dc_dial()vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = #
Jan 7 10:00:24.903: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=# digits=1, time_on=150, time_off=30
Jan 7 10:00:24.903: digit=, components=2, freq_of_first=0,
freq_of_second=0,
amp_of_first=1, amp_of_second=1
!---- Third ANI digit is sent: Forward Signal Group I-3. Jan 7 10:00:25.003:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN: digit=3,
rtp_timestamp=0x001E0010 dc_digit_up
Jan 7 10:00:25.003: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFF8)
received digit (3)
Jan 7 10:00:25.003: CSM voice (1/60): Rcvd Digit detected(3)
Jan 7 10:00:25.003: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2
Got Event 3
!---- Send Backward Signal Group A-5 (Caller ID request). Jan 7 10:00:25.003:
vtsp_r2_generate_digits: vdev_common=0x6205E5F8, string=5dc_dial()vtsp_dial_nopush
dsp_dtmf_dialing(): dial_string = 5

Jan 7 10:00:25.003: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=5 digits=1, time_on=65435, time_off=30
Jan 7 10:00:25.003: digit=, components=2, freq_of_first=1020,
freq_of_second=780,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:25.103: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=3,
duration=30dc_digit
Jan 7 10:00:25.103: csm_vtsp_digit_ready (vtsp_cdb=0x61B5BFF8) received digit (3)
Jan 7 10:00:25.103: CSM voice (1/60): Rcvd Digit detected(3)
Jan 7 10:00:25.103: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_CALLERID R2
    Got Event R2_TONE_OFF
Jan 7 10:00:25.103: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=5dc_dial()vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = #
Jan 7 10:00:25.103: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=# digits=1, time_on=150, time_off=30
Jan 7 10:00:25.103: digit=, components=2, freq_of_first=0,
freq_of_second=0,
amp_of_first=1, amp_of_second=1
!---- Digit 15 is sent: Forward Signal Group I-15 (end of ANI digit). Jan 7 10:00:25.203:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN: digit=15, rtp_timestamp=0x001E0010
dc_digit_up Jan 7 10:00:25.203: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFF8) received digit (*)
Jan 7 10:00:25.203: CSM voice (1/60): Rcvd Digit detected(*) Jan 7 10:00:25.203: R2 Incoming

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Voice(1/60): DSX (E1 0:8): **STATE:R2\_IN\_CALLERID R2**

**Got Event 15**

!--- *Send Backward Signal Group A-1 (next DNIS digit).* Jan 7 10:00:25.203:

vtsp\_r2\_generate\_digits: vdev\_common=0x6205E5F8, string=5dc\_dial()vtsp\_dial\_nopush

**dsp\_dtmf\_dialing(): dial\_string = 1**

Jan 7 10:00:25.203: dsp\_dtmf\_dialing: [0:1:8] packet\_Len=24

channel\_id=4929 packet\_id=90

string=1 digits=1, time\_on=65435, time\_off=30

Jan 7 10:00:25.203: digit=, components=2, freq\_of\_first=1020,

freq\_of\_second=1140,

amp\_of\_first=8192, amp\_of\_second=8192

Jan 7 10:00:25.303: vtsp\_process\_dsp\_message:

**MSG\_TX\_DTMF\_DIGIT\_OFF:** digit=15, duration=30dc\_digit Jan 7 10:00:25.303: csm\_vtsp\_digit\_ready (vtsp\_cdb=0x61B5BFF8) received digit (\*) Jan 7 10:00:25.303: CSM voice (1/60): Rcvd Digit detected(\*) Jan 7 10:00:25.303: R2 Incoming Voice(1/60): DSX (E1 0:8): **STATE:R2\_IN\_COLLECT\_DNIS R2**

**Got Event R2\_TONE\_OFF**

Jan 7 10:00:25.303: vtsp\_r2\_generate\_digits: vdev\_common=0x6205E5F8,

string=5dc\_dial()vtsp\_dial\_nopush dsp\_dtmf\_dialing(): dial\_string = #

Jan 7 10:00:25.303: dsp\_dtmf\_dialing: [0:1:8] packet\_Len=24 channel\_id=4929

packet\_id=90 string=# digits=1, time\_on=150, time\_off=30

Jan 7 10:00:25.303: digit=, components=2, freq\_of\_first=0, freq\_of\_second=0,

amp\_of\_first=1, amp\_of\_second=1

!--- *Second DNIS digit is sent: Forward Signal Group I-6.* Jan 7 10:00:25.391:

vtsp\_process\_dsp\_message: **MSG\_TX\_DTMF\_DIGIT\_BEGIN: digit=6,**

rtp\_timestamp=0x001E0010 dc\_digit\_up

Jan 7 10:00:25.391: csm\_vtsp\_digit\_ready\_up (vtsp\_cdb=0x61B5BFF8)

received digit (6)

Jan 7 10:00:25.391: CSM voice (1/60): Rcvd Digit detected(6)

Jan 7 10:00:25.391: R2 Incoming Voice(1/60): DSX (E1 0:8):

**STATE:R2\_IN\_COLLECT\_DNIS**

**R2 Got Event 6**

!--- *Send Backward Signal Group A-1.* Jan 7 10:00:25.391: vtsp\_r2\_generate\_digits:

vdev\_common=0x6205E5F8, string=56dc\_dial() vtsp\_dial\_nopush **dsp\_dtmf\_dialing(): dial\_string = 1**

Jan 7 10:00:25.391: dsp\_dtmf\_dialing: [0:1:8] packet\_Len=24

channel\_id=4929 packet\_id=90

string=1 digits=1, time\_on=65435, time\_off=30

Jan 7 10:00:25.391: digit=, components=2, freq\_of\_first=1020,

freq\_of\_second=1140,

amp\_of\_first=8192, amp\_of\_second=8192

Jan 7 10:00:25.491: vtsp\_process\_dsp\_message: **MSG\_TX\_DTMF\_DIGIT\_OFF:digit=6,**

duration=30dc\_digit

Jan 7 10:00:25.491: csm\_vtsp\_digit\_ready (vtsp\_cdb=0x61B5BFF8) received digit (6)

Jan 7 10:00:25.491: CSM voice (1/60): Rcvd Digit detected(6)

Jan 7 10:00:25.491: R2 Incoming Voice(1/60): DSX (E1 0:8):

**STATE: R2\_IN\_COLLECT\_DNIS R2**

**Got Event R2\_TONE\_OFF**

Jan 7 10:00:25.491: vtsp\_r2\_generate\_digits: vdev\_common=0x6205E5F8,

string=56dc\_dial() vtsp\_dial\_nopush dsp\_dtmf\_dialing(): dial\_string = #

Jan 7 10:00:25.491: dsp\_dtmf\_dialing: [0:1:8] packet\_Len=24

channel\_id=4929 packet\_id=90

string=# digits=1, time\_on=150, time\_off=30

Jan 7 10:00:25.491: digit=, components=2, freq\_of\_first=0,

freq\_of\_second=0,

amp\_of\_first=1, amp\_of\_second=1

!--- *Third DNIS digit is sent: Forward Signal Group I-7.* Jan 7 10:00:25.583:

vtsp\_process\_dsp\_message: **MSG\_TX\_DTMF\_DIGIT\_BEGIN: digit=7,**

rtp\_timestamp=0x001E0010 dc\_digit\_up

Jan 7 10:00:25.583: csm\_vtsp\_digit\_ready\_up (vtsp\_cdb=0x61B5BFF8)

received digit (7)

Jan 7 10:00:25.583: CSM voice (1/60): Rcvd Digit detected(7)

Jan 7 10:00:25.583: R2 Incoming Voice(1/60): DSX (E1 0:8):

**STATE:R2\_IN\_COLLECT\_DNIS R2**

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Got Event 7
!---- Send Backward Signal Group A-1. Jan 7 10:00:25.583: vtsp_r2_generate_digits:
vdev_common=0x6205E5F8, string=567dc_dial()vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = 1

Jan 7 10:00:25.583: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=1 digits=1, time_on=65435, time_off=30
Jan 7 10:00:25.583: digit=, components=2, freq_of_first=1020,
freq_of_second=1140,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:25.683: vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_OFF: digit=7,
duration=30dc_digit
Jan 7 10:00:25.683: csm_vtsp_digit_ready (vtsp_cdb=0x61B5BFF8)
received digit (7)
Jan 7 10:00:25.683: CSM voice (1/60): Rcvd Digit detected(7)
Jan 7 10:00:25.683: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_COLLECT_DNIS R2
Got Event R2_TONE_OFF
Jan 7 10:00:25.683: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=567dc_dial()vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = #
Jan 7 10:00:25.683: dsp_dtmf_dialing: [0:1:8] packet_Len=24
channel_id=4929 packet_id=90
string=# digits=1, time_on=150, time_off=30
Jan 7 10:00:25.683: digit=, components=2, freq_of_first=0,
freq_of_second=0,
amp_of_first=1, amp_of_second=1
Jan 7 10:00:25.835: vtsp_process_dsp_message: MSG_TX_DIALING_DONE
dc_dialing_done()
!---- Timeout is 3 seconds. Jan 7 10:00:28.583: R2 Incoming Voice(1/60): DSX (E1 0:8):
STATE:R2_IN_COLLECT_DNIS R2
Got Event R2_TONE_TIMER
!---- Send Backward Signal Group A-3: address-complete, changeover !--- to reception of group-B signal. Jan 7 10:00:28.583: vtsp_r2_generate_digits: vdev_common=0x6205E5F8,
string=567dc_dial()vtsp_dial_nopush dsp_dtmf_dialing(): dial_string = 3# Jan 7 10:00:28.583:
dsp_dtmf_dialing: [0:1:8] packet_Len=36
channel_id=4929 packet_id=90
string=3# digits=2, time_on=150, time_off=30
Jan 7 10:00:28.583: digit=, components=2, freq_of_first=1020,
freq_of_second=900,
amp_of_first=8192, amp_of_second=8192
Jan 7 10:00:28.583: digit=, components=2, freq_of_first=0, freq_of_second=0,
amp_of_first=1, amp_of_second=1
!---- Forward Signal Group II-1 is sent: subscriber without priority. Jan 7 10:00:28.831:
vtsp_process_dsp_message: MSG_TX_DTMF_DIGIT_BEGIN: digit=1, rtp_timestamp=0x001E0003 dc_digit_up
Jan 7 10:00:28.831: csm_vtsp_digit_ready_up (vtsp_cdb=0x61B5BFF8) received digit (1) Jan 7
10:00:28.831: CSM voice (1/60): Rcvd Digit detected(1) Jan 7 10:00:28.831: R2 Incoming
Voice(1/60): DSX (E1 0:8): STATE:R2_IN_CATEGORY R2 Got Event 1
Jan 7 10:00:28.831: CSM_PROC_IC1_COLLECT_ADDR_INFO:
CSM_EVENT_ADDR_INFO_COLLECTED
(DNIS=567, ANI=123) at slot 1, port 60
Jan 7 10:00:28.831: vtsp_tsp_call_accept_check (sdb=0x61DADEE0,
calling_number=123
called_number=567): peer_tag=0
Jan 7 10:00:28.835: VDEV_ALLOCATE: failed to allocate a device
Jan 7 10:00:28.835: VDEV_ALLOCATE_ALMOST_READY: failed to allocate
a non-idle modem
Jan 7 10:00:28.835: VDEV_ALLOCATE: failed to allocate a device
Jan 7 10:00:28.835: VDEV_ALLOCATE_ALMOST_READY: failed to allocate
a non-idle modem
Jan 7 10:00:28.835: VDEV_ALLOCATE: failed to allocate a device
Jan 7 10:00:28.835: VDEV_ALLOCATE_ALMOST_READY: failed to allocate
a non-idle modem
Jan 7 10:00:28.835: CSM_PROC_IC3_WAIT_FOR_RES_RESP: CSM_EVENT_RESOURCE_OK
at slot 1,
port 60

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Jan 7 10:00:28.835: vtsp_IC_switch : (voice_vdev= 0x61F19688)
Jan 7 10:00:28.835: vtsp_tsp_call_switch_ind (cdb=0x61B5BFF8,
tsp_info=0x61F19688,
calling_number=123 called_number=567 redirect_number=):
peer_tag=123dc_switch: fsm_pop()
Jan 7 10:00:28.835: vtsp_do_call_setup_ind
Jan 7 10:00:28.835: vtsp_do_call_setup_ind: Call ID=65581,
guid=62031A88
Jan 7 10:00:28.835: vtsp_do_call_setup_ind: type=0, under_spec=0,
name=b`, id0=9,
id1=0, id2=0, calling=123, called=567
Jan 7 10:00:28.835: dsp_cp_tone_off: [] packet_Len=8 channel_id=4929
packet_id=71
Jan 7 10:00:28.835: dsp_idle_mode: [] packet_Len=8 channel_id=4929
packet_id=68
Jan 7 10:00:28.835: dsp_close_voice_channel: [] packet_Len=8
channel_id=4929 packet_id=75
Jan 7 10:00:28.835: vtsp_timer_stop: 7063006
Jan 7 10:00:28.839: csm_vtsp_call_setup_resp (vdev_info=0x61F19688,
vtsp_cdb=0x61B5BFF8)
Jan 7 10:00:28.839: csm_vtsp_call_setup_resp:vdev_common BP TS
allocatedat BP_stream0,
BP_Ch8
Jan 7 10:00:28.839: csm_vtsp_call_setup_resp:DST_tdm_chnl call.
BP TS allocatedat stream 5, chan 13,BP_stream 0, BP_ch 8
Jan 7 10:00:28.839: csm_vtsp_call_setup_resp:DST_tdm_chnl call.
BP TS allocatedat stream 5, chan 13,BP_stream 0, BP_ch
8vtsp_open_voice_and_set_params
Jan 7 10:00:28.839: dsp_close_voice_channel: [0:1 (17)]
packet_Len=8 channel_id=4929
packet_id=75
Jan 7 10:00:28.839: dsp_open_voice_channel_20: [0:1 (17)] packet_Len=16
channel_id=4929
packet_id=74 alaw_ulaw_select=1 associated_signaling_channel=0
time_slot=0 serial_port=0
Jan 7 10:00:28.839: dsp_encap_config_20: [0:1 (17)] packet_Len=24
channel_id=4929
packet_id=92 TransportProtocol 2 t_sscc=0x0 r_sscc=0x0t_vpxcc=0x0
r_vpxcc=0x0
Jan 7 10:00:28.839: dsp_set_playout: [0:1 (17)] packet_Len=18
channel_id=4929 packet_id=76 mode=1 initial=60 min=4 max=200 fax_nom=300
Jan 7 10:00:28.839: dsp_echo_canceller_control: [0:1 (17)]
packet_Len=10 channel_id=4929
packet_id=66 flags=0x0
Jan 7 10:00:28.839: dsp_set_gains: [0:1 (17)] packet_Len=12
channel_id=4929 packet_id=91
in_gain=0 out_gain=0
Jan 7 10:00:28.839: dsp_vad_enable: [0:1 (17)] packet_Len=10
channel_id=4929 packet_id=78
thresh=-38act_proceeding
Jan 7 10:00:28.839: csm_vtsp_call_proceeding:DST_tdm_chnl call.
BP TS allocatedstream 5,
chan 13,BP_stream 0, BP_ch 8act_alert
Jan 7 10:00:28.867: vtsp_ring_noan_timer_start: 7063009
Jan 7 10:00:28.867: csm_vtsp_call_alert (vtsp_cdb=0x61B5BFF8)
Jan 7 10:00:28.867: csm_vtsp_call_alert: CSM_EVENT_ALERTING_RECEIVED
Jan 7 10:00:28.867: CSM_IC5_WAIT_FOR_SWITCH_OVER: at slot 1, port 60
Jan 7 10:00:28.867: CSM_EVENT_ALERTING_RECEIVED:
Jan 7 10:00:28.867: calling alerting_start_event
!--- Note: For modems, Backward Signal !--- Group B-6 (subscriber's line free, charge) !--- is
sent immediately. !--- For voice, it is delayed until alerting is received. !--- Notice that
"R2_REJECT" is printed instead of R2_ALERTING. !--- This printing issue is solved in Cisco IOS
Software Release 12.1T.
```

Jan 7 10:00:28.867: R2 Incoming Voice(1/60): DSX (E1 0:8):  
**STATE: R2\_IN\_IDLE R2**  
**Got Event R2\_REJECT**  
 Jan 7 10:00:28.867: **R2\_ALERTING:** r2\_comp\_idle  
 Jan 7 10:00:28.867: vtsp\_r2\_generate\_digits: vdev\_common=0x6205E5F8,  
 string=567act\_bridge  
 Jan 7 10:00:28.867: dsp\_voice\_mode: [0:1 (17)] packet\_Len=24  
 channel\_id=4929 packet\_id=73  
 coding\_type=1 voice\_field\_size=80 VAD\_flag=0 echo\_length=64  
 comfort\_noise=1  
 inband\_detect=1 digit\_relay=2 AGC\_flag=0dsp\_dtmf\_mode  
 (VTSP\_TONE\_R2\_MF\_FORWARD\_MODE)  
*!--- Answer signal (B-6) is sent after alerting is received. !--- Send Backward Signal Group B6 signal (Subscriber's line free, charge).* Jan 7 10:00:28.871: dsp\_dtmf\_mode: [0:1 (17)]  
 packet\_Len=10 channel\_id=4929 packet\_id=65 dtmf\_or\_mf=1vtsp\_r2\_dial vtsp\_r2\_dial():  
 fsm\_push(vtsp\_r2\_state\_table) **dsp\_dtmf\_dialing(): dial\_string = 6**

Jan 7 10:00:28.871: dsp\_dtmf\_dialing: [0:1 (17)] packet\_Len=24  
 channel\_id=4929  
 packet\_id=90 string=6 digits=1, time\_on=65435, time\_off=30  
 Jan 7 10:00:28.871: digit=, components=2, freq\_of\_first=900,  
 freq\_of\_second=780,  
 amp\_of\_first=8192, amp\_of\_second=8192  
 Jan 7 10:00:28.923: vtsp\_process\_dsp\_message: MSG\_TX\_DTMF\_DIGIT\_BEGIN: digit=1,  
 rtp\_timestamp=0x001E0006 dc\_digit\_up  
 Jan 7 10:00:28.923: csm\_vtsp\_digit\_ready\_up (vtsp\_cdb=0x61B5BFF8)  
 received digit (1)  
 Jan 7 10:00:28.923: CSM voice (1/60): Rcvd Digit detected(1)  
 Jan 7 10:00:28.923: R2 Incoming Voice(1/60): DSX (E1 0:8):  
**STATE: R2\_IN\_COMPLETE**  
 R2 Got Event 1  
 Jan 7 10:00:28.971: vtsp\_process\_dsp\_message: MSG\_TX\_DTMF\_DIGIT\_OFF: digit=1,  
 duration=30dc\_digit  
 Jan 7 10:00:28.971: csm\_vtsp\_digit\_ready (vtsp\_cdb=0x61B5BFF8)  
 received digit (1)  
 Jan 7 10:00:28.971: CSM voice (1/60): Rcvd Digit detected(1)  
 Jan 7 10:00:28.971: R2 Incoming Voice(1/60): DSX (E1 0:8):  
**STATE: R2\_IN\_COMPLETE R2**  
**Got Event R2\_TONE\_OFF**  
 Jan 7 10:00:28.971: vtsp\_r2\_generate\_digits: vdev\_common=0x6205E5F8,  
 string=567dc\_dial()  
 vtsp\_dial\_nopush dsp\_dtmf\_dialing(): dial\_string = #  
 Jan 7 10:00:28.971: dsp\_dtmf\_dialing: [0:1 (17)] packet\_Len=24  
 channel\_id=4929  
 packet\_id=90 string=# digits=1, time\_on=150, time\_off=30  
 Jan 7 10:00:28.975: digit=, components=2, freq\_of\_first=0,  
 freq\_of\_second=0,  
 amp\_of\_first=1, amp\_of\_second=1ds\_dialing\_defaultds\_dialing\_default  
 Jan 7 10:00:29.127: vtsp\_process\_dsp\_message:  
 MSG\_TX\_DIALING\_DONEdc\_dialing\_done()  
 Jan 7 10:00:29.971: R2 Incoming Voice(1/60): DSX (E1 0:8):  
**STATE: R2\_IN\_WAIT\_GUARD R2**  
**Got Event R2\_TONE\_TIMER**  
 Jan 7 10:00:29.971: R2\_IN\_IDLE:2 r2\_in\_connect called  
 Jan 7 10:00:29.971: R2\_IN\_CONNECT: call end dial  
 Jan 7 10:00:29.971: pop the dial state machine  
 Jan 7 10:00:29.971: vtsp\_r2\_end\_dial: vdev\_common=0x6205E5F8,  
 string=567ds\_end\_dial():  
 fsm\_pop() act\_caps\_ind  
 Jan 7 10:00:29.971: act\_caps\_ind:Encap 1, Vad 2, Codec 0x4,  
 CodecBytes 20, FaxRate 2,  
 FaxBytes 20 SignalType 0 DtmfRelay 1, Modem 1act\_caps\_ack  
 Jan 7 10:00:29.971: dsp\_idle\_mode: [0:1 (17)] packet\_Len=8  
 channel\_id=4929 packet\_id=68

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Jan 7 10:00:29.971: act_caps_ack: codec = 15, ret = 1
Jan 7 10:00:29.971: dsp_cp_tone_off: [0:1 (17)] packet_Len=8
channel_id=4929 packet_id=71
Jan 7 10:00:29.971: dsp_idle_mode: [0:1 (17)] packet_Len=8
channel_id=4929 packet_id=68
Jan 7 10:00:29.971: dsp_encap_config_20: [0:1 (17)] packet_Len=24
channel_id=4929
packet_id=92 TransportProtocol 2 t_ssref=0x0 r_ssref=0x0 t_vpxcc=0x0
r_vpxcc=0x0
Jan 7 10:00:29.971: dsp_voice_mode: [0:1 (17)] packet_Len=24
channel_id=4929 packet_id=73
coding_type=19 voice_field_size=20 VAD_flag=1 echo_length=64
comfort_noise=1
inband_detect=1 digit_relay=2 AGC_flag=0act_alert_connect
Jan 7 10:00:30.255: vtsp_ring_noan_timer_stop: 7063148
Jan 7 10:00:30.255: dsp_cp_tone_off: [0:1 (17)] packet_Len=8
channel_id=4929 packet_id=71
Jan 7 10:00:30.255: csm_vtsp_call_connect (vtsp_cdb=0x61B5BFF8,
voice_vdev=0x61F19688)
Jan 7 10:00:30.255: CSM_IC5_WAIT_FOR_SWITCH_OVER:
CSM_EVENT_MODEM_OFFHOOK at slot 1,
port 60
Jan 7 10:00:30.607: CSM_RX_CAS_EVENT_FROM_NEAT:(0007):
EVENT_CHANNEL_CONNECTED at slot 1
and port 60
Jan 7 10:00:30.607: CSM_PROC_IC6_WAIT_FOR_CONNECT:
CSM_EVENT_DSX0_CONNECTED at slot 1,
port 60
Jan 7 10:00:30.607: from NEAT(0): (0/8): TX ANSWERED (ABCD=0101)
eefje#

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## Informations connexes

- [Signalisation E1 R2 pour la voix sur IP sur le serveur d'accès Cisco AS5300](#)
- [Signalisation E1 R2 pour les routeurs des gammes Cisco 3620 et 3640](#)
- [Personnalisation d'E1 R2 à l'aide de la commande cas-custom](#)
- [Configuration de la signalisation associée à E1 R2 et au canal](#)
- [Signalisation E1 R2 pour les serveurs d'accès Cisco AS5300 et Cisco AS5200](#)
- [Assistance technique concernant la technologie vocale](#)
- [Assistance concernant les produits vocaux et de communications unifiées](#)
- [Dépannage des problèmes de téléphonie IP Cisco](#)
- [Support et documentation techniques - Cisco Systems](#)