

فاشكتساو E1 R2 تاراشا لاسرا نيوكت اهحالصإو عاطخالا

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المقدمة

يقدم هذا المستند إدخالات الأوامر المتدرجة الضرورية لتنفيذ إرسال إشارات E1 R2. يقدم هذا المستند أيضا معلومات أستكشاف الأخطاء وإصلاحها باستخدام أوامر debug.

ملاحظة: قبل إستخدام هذا المستند، يوصى بقراءة [نظرية إرسال الإشارات E1 R2](#) لأول مرة.

المتطلبات الأساسية

المتطلبات

قبل أن تحاول إجراء هذا التكوين، فتأكد من استيفاء المتطلبات الأساسية التالية:

- ينطبق إرسال إشارات R2 على E1 فقط.
- إرسال إشارات R2 غير مدعوم على الموجه Cisco MC3810.
- لتشغيل إرسال إشارات R2 على موجهات سلسلة Cisco 2600/3600، يلزم توفر هذا الجهاز: VWIC-1MFT-E1 أو VWIC-2MFT-E1-DI أو VWIC-2MFT-E1 مع إحدى وحدات الكثافة الصوتية هذه: [NM-HDV](#) (وحدة الشبكة الصوتية عالية الكثافة) أو NM-HD-2VE (وحدة شبكة الفاكس/الصوت لاتصالات IP ذات الفتحتين).
- قم بتعريف الأمر ds0-group (أو cas-group، استنادا إلى إصدار Cisco IOS) على وحدات التحكم E1

- (موجهات Cisco 2600/3600، AS5x00).
• أستخدم الأمر **cas-custom** لتخصيص متغيرات E1 R2 لبلدان أو مناطق مختلفة.

المكونات المستخدمة

أسست المعلومة في هذا وثيقة على هذا برمجية وجهاز صيغة:

- Cisco AS5300 مع برنامج Cisco IOS، الإصدار 12.0.7T

ملاحظة: تم تقديم إرسال إشارات E1 R2 إلى موجهات السلسلة 3600/2600 من Cisco في البرنامج Cisco IOS Software الإصدار 12.1.2XH و 12.1.3T.

تم إنشاء المعلومات الواردة في هذا المستند من الأجهزة الموجودة في بيئة معملية خاصة. بدأت جميع الأجهزة المستخدمة في هذا المستند بتكوين ممسوح (افتراضي). إذا كانت شبكتك مباشرة، فتأكد من فهمك للتأثير المحتمل لأي أمر.

الاصطلاحات

للحصول على مزيد من المعلومات حول اصطلاحات المستندات، ارجع إلى [اصطلاحات تلميحات Cisco التقنية](#).

التكوين

يقدم هذا القسم لك المعلومات التي يمكنك إستخدامها لتكوين E1 R2.

ملاحظة: للعثور على معلومات إضافية حول الأوامر التي يستخدمها هذا المستند، ارجع إلى [أداة بحث الأوامر \(للعلماء المسجلين فقط\)](#).

AS5300: توافق برنامج بطاقة ميزة الصوت (VFC) من Cisco IOS

قبل تنفيذ إرسال إشارات E1 R2 في موجه Cisco AS5300، تأكد من أن إصدار برنامج Cisco IOS software متوافق مع برنامج Cisco VCware في الوحدة النمطية E1. للتحقق من توافق برنامج Cisco IOS Software، ارجع إلى [مصفوفة توافق Cisco VCWare ل Cisco AS5300](#). إذا كانت الإصدارات غير متوافقة، فإن وحدات معالج الإشارة الرقمية (DSP) في بطاقة الصوت لا تقوم بالتحميل ولا تتم معالجة الإشارة الصوتية.

بشكل نموذجي، إذا كان إصدار Cisco VCWare غير متوافق مع برنامج Cisco IOS Software، فيمكنك إدخال أمر الواجهة **show vfc slot_number** لترى هذا كما هو موضح في هذا المثال.

```
eefje#show vfc 1 interface
Rx: in ptr 18, outptr 0
Tx: in ptr 14 outptr 14
in hw queue, 0 queue head , 0 queue tail 0
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
drops, 0 no buffers, 0 input errors 0
bytes output, 14 frames output 121
bounce errors 0 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

في المثال الأول مخرج الأمر `show vfc slot_number interface`، لا يتم تثبيت رقم الوحدة النمطية ل DSP توضح عبارات أن الإصدارات غير متوافقة لرقم الوحدة النمطية هذا.

هذه المجموعة الثانية من الإخراج هي مثال على وحدات DSP النمطية التي تم تحميل إصدار Cisco VCWare الصحيح:

```
eefje#show vfc 1 interface
Rx: in ptr 24, outptr 0
TX: in ptr 15 outptr 15
in hw queue, 0 queue head , 0 queue tail 0
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
drops, 0 no buffers, 0 input errors 0
bytes output, 141647 frames output 1416459
bounce errors 0 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
drops, 0 no buffers, 0 input errors 0
bytes output, 0 frames output 0
bounce errors 0 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
drops, 0 no buffers, 0 input errors 0
bytes output, 0 frames output 0
bounce errors 0 0
```

للتحقق من إصدار Cisco VCWare المثبت، أدخل الأمر `show vfc slot_number version vcw`، كما هو موضح في هذا المثال:

```
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
```

ملاحظة: تأكد من تطابق إصدار تقنية VCWare من Cisco (c549 أو c542) مع تقنية DSP ل VFC المثبتة (-DSPM) 542: دعم الصوت أحادي الكثافة أو DSPM-549: دعم الصوت عالي الكثافة).

[تكوين E1 R2](#)

أتمت هذا steps in order to شكلت E1 R2:

1. قم بإعداد وحدة التحكم E1 المتصلة بالمحول أو التبادل الفرعي التلقائي الخاص (PBX). تأكد من أن صياغة وتشكيل E1 مضبوطا بشكل صحيح.
2. لإطار E1، أختَر CRC أو ليس CRC.

3. لتحديد خط E1، أختار إما HDB3 أو AMI.
4. لمصدر ساعة E1، أختار إما داخلي أو خط. تذكر دائما أن مختلف PBXs لها متطلبات مختلفة على مصدر الساعة.
5. [تكوين إشارات الخط.](#)
6. [تكوين إرسال إشارات التسجيل البيئي.](#)
7. قم بتخصيص التكوين باستخدام الأمر `cas-custom`.

[تكوين إشارات الخط](#)

أستخدم تسلسل الأوامر هذا لتحديد إشارات الخط لديك.

```
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
...
```

هذا هو تسلسل الأوامر لبرنامج Cisco IOS Software، الإصدار 11.3.

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

ملاحظة: إذا قمت بالترقية من الإصدار 11.3 من برنامج Cisco IOS Software إلى الإصدار 12.0، فإن الأمر الجديد يستبدل الأمر القديم تلقائياً.

[تكوين إرسال إشارات التسجيل البيئي](#)

يوضح مثال تسلسل الأوامر هذا كيفية تكوين الأنواع المختلفة من إرسال إشارات التسجيل البيئي:

```
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
```

يحتوي تنفيذ إرسال إشارات R2 من Cisco على دعم خدمة التعرف على الرقم المطلوب (DNIS) الممكن بشكل افتراضي. إذا قمت بتمكين خيار التعرف التلقائي على الرقم (ANI)، فإنه ما يزال يتم تجميع معلومات DNIS. لا تقوم مواصفات خيار ANI بتعطيل مجموعة DNIS. DNIS هو الرقم الذي يسمى ANI هو رقم المتصل. على سبيل المثال، إذا قمت بتكوين موجه باسم A لاستدعاء موجه باسم B، فسيتم تعيين رقم DNIS للموجه B ويتم تعيين رقم ANI للموجه A. يكون ANI مماثلاً لمعرفة المتصل.

[تخصيص E1 R2 باستخدام الأمر cas-custom](#)

يتم استخدام الأوامر الفرعية تحت الأمر `cas-custom` لاستيعاب متغيرات الدولة. كما يتم استخدامها لتخصيص معلمات الإشارات المرتبطة بالقناة (CAS). يوضح تسلسل الأوامر هذا كيفية عرض جميع خيارات الأوامر `cas-custom`.

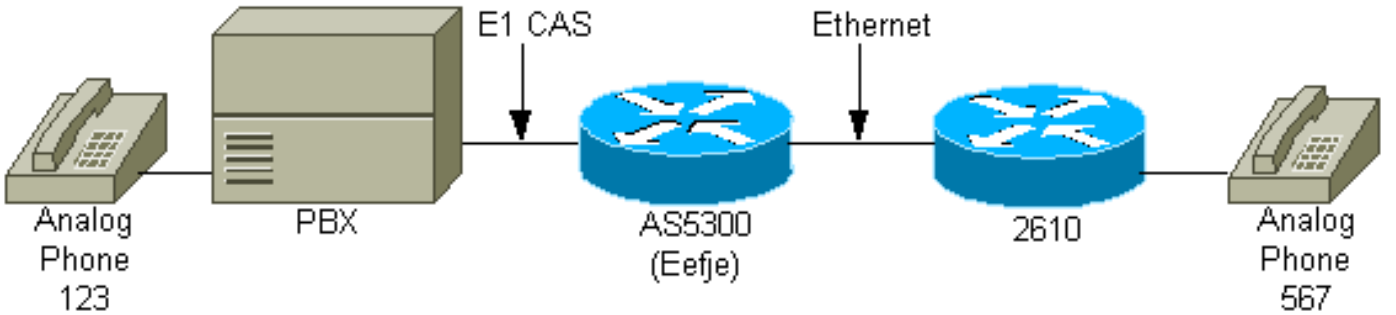
```
eefje(config)#controller E1 0
eefje(config-controller)#cas-custom 1
?#(eefje(config-ctrl-cas
:cas custom commands
```

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

لمزيد من المعلومات حول معلمات الأوامر **cas-custom**، ارجع إلى [تخصيص E1 R2 باستخدام الأمر cas-custom](#).

الرسم التخطيطي للشبكة

يستخدم هذا المستند إعداد الشبكة التالي.



التكوينات

لأغراض هذا المستند، هذه هي تكوينات R2 المختلفة الثلاثة التي يتم عرضها عبر واجهة E1:

- [R2 رقمي غير مضطر](#)
- [R2 رقمي شبه إلزامي](#)
- [R2 Digital COMPELLED ANI](#)

تم تعديل التكوينات لعرض المعلومات التي يتناقش فيها هذا المستند فقط.

تم تكوين EEFJE على R2 رقمي غير إلزامي	
	hostname eefje
	!
	controller E1 0
	clock source line primary
	dso-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
!

```

تمت تهيئة EEFJE لنموذج R2 Digital Half-Compelled

```

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
!

```

تمت تهيئة البنية الأساسية لشبكة إيثرنت الموفرة للطاقة (EEFJE) للطرز R2 Digital Compelled ani

```

hostname eefje
controller E1 0 clock source line primary ds0-group !
timeslots 1-15 type r2-digital r2-compelled ani cas- 1
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  
prefix 123 0:1  
!  
dial-peer voice 567 voip destination-pattern 567 session  
target ipv4:2.0.0.2  
!
```

[التحقق من الصحة](#)

لا يوجد حاليًا إجراء للتحقق من صحة هذا التكوين.

[استكشاف الأخطاء وإصلاحها](#)

يوفر هذا القسم معلومات يمكنك استخدامها لاستكشاف أخطاء التكوين وإصلاحها.

[استكشاف أخطاء E1 R2 وإصلاحها](#)

هذه هي معلومات استكشاف الأخطاء وإصلاحها المتعلقة بهذا التكوين. اتبع هذه التعليمات لاستكشاف أخطاء عملية التكوين لديك وإصلاحها.

1. تحقق من أن وحدة التحكم E1 0 قيد التشغيل. إذا كان معطلا، فتتحقق من الإطارات وترميز الخط ومصدر الساعة والتنبيهات واستبدال الكبل وإعادة بيع البطاقة وما إلى ذلك . [أستخدم تخصيص E1 R2 مع وثيقة الأمر cas-custom](#) كمرجع.
2. إذا كنت تستخدم AS5300، فتتحقق من تثبيت DSPs بشكل صحيح باستخدام أمر `show vfc slot number` الواجهة.
3. قم بتكوين الطلب الداخلي المباشر (DID) على نظير خدمة الهاتف القديمة العادية (POTS)، حتى يتم استخدام الأرقام المستلمة لاختيار نظير صادر.
4. حدد `(cptone)` `(cptone)` محددة لبلدك) على المنافذ الصوتية. يجب تكوين أمر `cptonecontry` من أجل مطابقة أمر `cas-custom country`. تعمل المعلمة `cptone` على تعيين نغمات تقدم المكالمات لدولة معينة، والأهم من ذلك، تقوم بضبط التشفير إلى قانون أو قانون u، والذي يعتمد على الدولة. الترميز الافتراضي للولايات المتحدة هو u-law.
5. مطابقة بنود التسجيل وإشارات التسجيل لتكوين المحول.
6. قم بتشغيل بعض [تصحيح الأخطاء](#) الموضحة في هذا المستند ودراسة المخرجات.
7. تحقق من الاتصال بين الموجه و PBX أو المحول: هل تم الاستيلاء على الخط؟ هل يستقبل الموجه/يرسل أرقامًا؟ اكتشف الجانب الذي يمحو المكالمة. إن أمكن، استخدم أحدث إصدارات برنامج Cisco IOS software المتوفرة على Cisco.com.

[أوامر show و debug](#)

يتم دعم بعض أوامر العرض بواسطة [أداة مترجم الإخراج \(العملاء المسجلون فقط\)](#)، والتي تتيح لك عرض تحليل [إخراج أمر العرض](#).

ملاحظة: قبل إصدار أوامر debug، راجع [المعلومات المهمة في أوامر تصحيح الأخطاء](#).

ملاحظة: بالنسبة لبرنامج Cisco IOS الإصدار 12.0، استخدم [تصحيح الأخطاء](#) التالية:

- **debug cas** - لإرسال إشارات الخط.
- **debug csm voice** - لإرسال إشارات التسجيل البيئي.
- **debug vtsp all - in order to** جعلت الإنتاج من كل رسالة (رقم) يتبادل بين ال PBX والموجه. بالنسبة لبرنامج Cisco IOS الإصدار 11.3، أستخدم الأوامر التالية:

- **Modem-mgmt CSM-RBS** تصحيح أخطاء - لإرسال إشارات الخط (تحتاج إلى تحديد الخدمة الداخلية في وضع التكوين أولاً).
- **debug csm voice** - لإرسال إشارات التسجيل البيئي.
- **debug vtsp all - in order to** جعلت الإنتاج من كل رسالة (رقم) يتبادل بين ال PBX والموجه. بالنسبة للأنظمة الأساسية AS5400 و AS5350، أستخدم تصحيح الأخطاء التالية:

- **debug sigsm r2** - لإرسال إشارات التسجيل البيئي
- **debug vtsp all - in order to** جعلت الإنتاج من كل رسالة (رقم) يتبادل بين ال PBX والموجه.

إخراج تصحيح الأخطاء للعبئة

بما أن هناك ثلاثة تكوينات مختلفة معروضة سابقا في هذا المستند، فيما يلي ثلاثة تصحيح أخطاء مختلفة:

R2 Digital Non-Compelled: مكالمة واردة إلى 567

لفهم مخرجات تصحيح الأخطاء هذه بشكل أفضل، ارجع إلى نظرية إرسال إشارات 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
dspm 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 ctrl0 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
packet_id=75 8529=
Jan 6 10:41:28.721: dsp_open_voice_channel_20: [0:1:0] packet_len=16 channel_id
packet_id=74 alaw_ulaw_select=1 associated_signaling_channel=0 time_slot=0 8529=
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_src=0x0 r_src=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
rtsp_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
rtsp_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
: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^Lx, 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

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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_ssrc=0x0 r_ssrc=0x0 t_vpxcc=0x0 r_vpxcc=0x0
Jan 6 10:41:34.317: dsp_set_payout: [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
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_ssrc=0x0 r_ssrc=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
```

لفهم إخراج تصحيح الأخطاء هذا بشكل أفضل، ارجع إلى [نظرية إرسال إشارات 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
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 ctrl0 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_ssrc=0x0 r_ssrc=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
```

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(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
,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

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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:
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
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_ssrc=0x0 r_ssrc=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


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FaxRate 2, FaxBytes 20 SignalType 0
DtmfRelay 1, Modem lact_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_ssrc=0x0 r_ssrc=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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567 R2 Digital Compelled ANI: مكالمة واردة ل

لفهم مخرجات تصحيح الأخطاء هذه بشكل أفضل، ارجع إلى [نظرية إرسال إشارات E1 R2](#).

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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 ctrl0 chan8
Jan 7 10:00:23.927: vtsp_do_call_setup_ind

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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
(Ovtsp_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=0x61B5BFF8
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
chan 13,BP_stream 255, BP_ch 15 ,5
.Jan 7 10:00:23.927: csm_vtsp_call_setup_resp:DST_tdm_chnl call
BP TS allocatedat stream
chan 13,BP_stream 0, BP_ch 8 ,5
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
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_ssrc=0x0 r_ssrc=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
rtptimestamp=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: ---!

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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=4929 packet_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**
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=0x61B5BFF8) 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=0x61B5BFF8) 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

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
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
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_DONEdc_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
(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_ssrc=0x0 r_ssrc=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
rtptimestamp=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
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_ssrc=0x0 r_ssrc=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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