T.37 OnRamp傳真

目錄

簡介

Fax over IP T.37 Store and Forward Fax主文檔的本節介紹OnRamp儲存轉發傳真。OnRamp T.37是接受傳真呼叫、將該傳真編碼為標籤影象檔案格式(TIFF)並將該TIFF作為附件傳送到電子郵件伺服器的過程。

本文包含使該功能可運作所需的組態。疑難排解一節將詳細介紹很有用的**debug**命令及其解釋方式。網路圖表一節中顯示了使用的拓撲。

必要條件

需求

本文檔的具體要求在IP T.37儲存和轉發傳真這一主部分中指定。

採用元件

本文件所述內容不限於特定軟體和硬體版本。

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

慣例

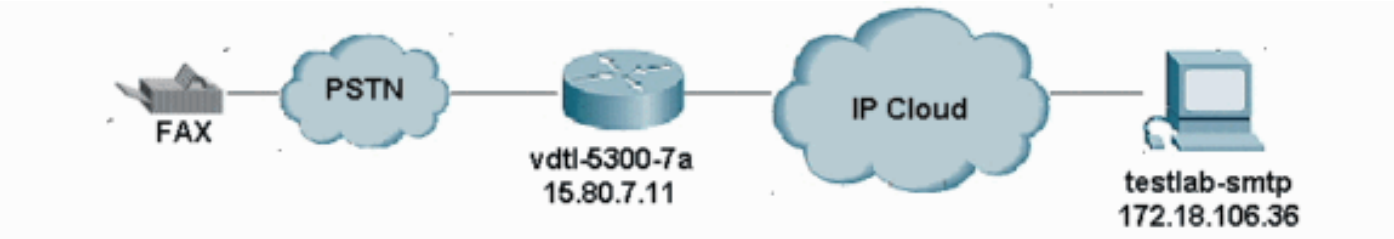
如需文件慣例的詳細資訊，請參閱思科技術提示慣例。

組態

在以下各節中，首先說明與OnRamp傳真配置相關的Cisco IOS®軟體配置引數，然後顯示5300配置，並進一步說明重要命令的功能。在5300配置之後的部分中可以找到一些可選的配置引數。

網路圖表

本文檔使用下圖所示的網路設定。



配置引數

強制引數：	
fax interface-type fax-mail	為網關啟用T.37功能。需要重新啟動5300，但無需重新啟動5350或5400。
mta傳送伺服器	這是路由器將傳送OnRamp電子郵件的簡單郵件傳輸協定(SMTP)伺服器的主機名或IP地址。若沒有此組態，路由器便不知道將OnRamp電子郵件傳送到何處。有關未配置伺服器的調試和控制檯消息，請參閱未配置伺服器部分。
mta send postmaster	如果mta傳送的**mail-from選項未計算**或未配置，則使用此地址。它放在OnRamp電子郵件發件人**欄位**中。如果存在**mta send mail-from username**和**mta send mail-from hostname**，則此選項為可選。按一下here以調試失敗呼叫的mspi。
ip domain-name	用於使用hostname.domain-name標識HELO消息中的電子郵件發件人。配置此命令後，必須重新載入路由器。
call application voice	定義應用程式的全域性名稱

onramp flash:app_libretto_onramp.2.0.1.1.tcl	（本例中為onramp）及其位置（本例中為路由器的快閃記憶體）。
dial-peer voice 8913180 pots application onramp	在此撥號對等體匹配時呼叫應用程式onramp。
dial-peer voice 1 mmoip application fax_on_vfc_onramp_app out-bound	當匹配此Multimedia Mail over IP(MMoIP)對等項時要呼叫的應用程式。預捆綁在Cisco IOS軟體中。通過**show call application voice summary**可見。
可選引數：	
mta send mail-from hostname	這是要在OnRamp電子郵件的**From**欄位中使用的主機名。如果沒有**mta send postmaster**命令，則為強制命令。如果使用mta **send mail-from username**，則必須配置。
mta send mail-from username	這是將在OnRamp電子郵件的**From**欄位中使用的發起方。與**mta send mail-from hostname**結合使用以獲取整個「發件人」欄位，即username@hostname。如果沒有**mta send postmaster**命令，則為強制命令。如果使用**mta send mail-from hostname**，則必須進行配置。
mta傳送主題	要在OnRamp電子郵件的**Subject**欄位中使用的文本字串。
mta send with-subject	• 使用關鍵字s附加**主叫方號碼**。 • 附加帶有關鍵字d的**被叫方號碼**。 • 使用關鍵字**both**追加呼叫方號碼和被叫方號碼。 有關調試顯示，請按一下此處。
mta send return-receipt-to	關鍵字是**username**和**hostname**。它們共同組成了disposition-notification-to:username@hostname。
dial-peer voice *number* mmoip mdn	請求通過此MoIP對等體傳送的電子郵件請求將消息處置通知(MDN)傳送到**mta send return-receipt-to**命令定義的

	目標。
dial-peer voice *number* mmoip dsn {delay |成功 |失敗}	請求將傳遞狀態通知(DSN)傳送到由mta send mail-from命令定義的目標

OnRamp配置

```
vdtl-5300-7a# show running-config
Building configuration...

Current configuration : 2294 bytes
!
! Last configuration change at 10:49:16 EST Mon Mar 18 2003
! NVRAM config last updated at 11:00:42 EST Mon Mar 4 2003
!
version 12.2
service timestamps debug datetime msec localtime
service timestamps log datetime msec localtime
no service password-encryption
!
hostname vdtl-5300-7a
!
!
resource-pool disable
clock timezone EST -5
!
ip subnet-zero
ip domain-name testlab-t37.com
!--- The ip domain-name command is needed so the router sends a fully qualified !--- domain-name
(FQDN) to the email server.

!--- Router must be reloaded after ip domain-name configuration due to a known bug !--- that has
since been resolved.

ip name-server 172.18.106.36
!--- The ip name-server command is required in order to do name resolution.

!
!
isdn switch-type primary-5ess
!
fax receive called-subscriber 8913180
fax interface-type fax-mail
!
mta send server testlab-smtp.testlab-t37.com port 25
!--- The mta send server command identifies the email server for OnRamp emails.

!
mta send subject Fax from On-Ramp GW vdlt-5300-7a
mta send with-subject both
mta send postmaster administrator@testlab-t37.com
!
!--- The address set with mta send postmaster is used as the "From" address !--- unless mta send
mail-from commands are defined.

!
mta send mail-from hostname vdtl-5300-7a.testlab-t37.com
mta send mail-from username $s$
mta send return-receipt-to hostname testlab-t37.com
mta send return-receipt-to username admin
```

```
mta receive maximum-recipients 0
call-history-mib retain-timer 500
!
controller T1 0
framing esf
clock source line primary
linecode b8zs
pri-group timeslots 1-24
!
!
!
interface Ethernet0
ip address 15.80.7.11 255.255.255.0
!
interface Serial0:23
no ip address
isdn switch-type primary-5ess
isdn incoming-voice modem
no cdp enable
!
ip classless
ip route 0.0.0.0 0.0.0.0 15.80.7.1
no ip http server
ip pim bidir-enable
!
call rsvp-sync
!
call application voice onramp flash:app_libretto_onramp.2.0.1.1.tcl
!--- This identifies the call application to use. It is named "onramp" in !--- this example.
voice-port 0:D ! mgcp profile default ! dial-peer voice 1 mmoip application
fax_on_vfc_onramp_app out-bound destination-pattern 8913144 information-type fax session target
mailto:$d$@testlab-t37.com ! !--- The MMoIP peers contain configuration specific to the called
party number. !--- It requests MDN and DSN. It identifies the application to use for the
outbound !--- call leg and specifies the address to which the email will be sent. mdn dsn
success dsn failure ! dial-peer voice 891314 pots application onramp incoming called-number
891314[4-5] direct-inward-dial port 0:D !--- The pots peers for T.37 are no different than for
voice calls with the exception of !--- using the application defined above in the call
application global configuration !--- command. The direct-inward-dial command is required unless
using a redialer.

!
line con 0
exec-timeout 0 0
line aux 0
line vty 0 4
login
!
ntp clock-period 17179806
ntp server 172.18.106.15
end

vdtl-5300-7a#
```

可選配置

以下是一些可選的配置引數。第一個示例說明如何使用傳統電子郵件地址配置多個電子郵件帳戶，第二個示例說明如何使用電子郵件地址的被叫方號碼配置多個電子郵件帳戶。

範例 1：

!	在此配置中，PRI有兩個直接撥入(DID)號碼：891-3144和891-3145。根據撥打的號碼，電

dial-peer voice 1 mmoip application fax_on_vfc_onramp_app out-bound destination-pattern 8913144 information-type fax session target mailto:andy@testlab-t37.com ! dial-peer voice 2 mmoip application fax_on_vfc_onramp_app out-bound destination-pattern 8913145 information-type fax session target mailto:bobby@testlab-t37.com ! dial-peer voice 891314	子郵件被傳送到andy@testlab-t37.com或bobby@testlab-t37.com。

pots application onramp incoming called-number 891314[4-5] direct-inward-dial port 0:D !	

範例 2：

! dial-peer voice 1 mmoip application fax_on_vfc_onramp_app out-bound destination-pattern 8913144 information-type fax session target mailto:d@testlab-t37.com !	透過此設定，撥出號碼識別服務(DNIS)（被叫方號碼）將插入RCPT TO:SMTP命令。這樣，客戶就可以為每個使用者提供OnRamp應用程式的DID。他們只需在電子郵件伺服器上新增別名。3月12日15:42:12.947:(C)S:RCPT到：<FAX=8913144@testlab-t37.com>

注意：確保電子郵件別名是FAX=8913144@domain.com而不是8913144@domain.com ，或者電子

郵件無法正確傳送。

疑難排解

失敗的調試

注意：配置更改在調試的上方說明。

```
debug mspi send
!
fax interface-type fax-mail
mta send server testlab-smtp.testlab-t37.com port 25
mta send mail-from hostname whatever.com
mta receive maximum-recipients 0
call-history-mib retain-timer 500
!
```

註：配置中省略mta send mail-from username命令，也省略mta send postmaster命令。

```
vdtl-5300-7a#
Mar 4 10:03:29.165: mspi_setup_req: for cid=0x27
Mar 4 10:03:29.165: envelope_from=FAX=@        !--- Note: This is not a valid email address (no
domain). Mar 4 10:03:29.165: envelope_to=andy@testlab-t37.com
Mar 4 10:03:30.165: mspi_chk_connect: cid=0x27, cnt=0,
Mar 4 10:03:30.165: SMTP connected to the server !  !--- The connection to the SMTP server is
initiated. Mar 4 10:03:30.165: mspi_bridge: cid=0x27, dst cid=0x28, Mar 4 10:03:56.985:
mspi_xmit: cid=0x27, st=CONFERENCED, src_cid=0x28, buf cnt=0 Mar 4 10:03:56.985: %MSPI-4-
MSPI_NO_SMTP_SEND: MSPI- Could not
 send data to the SMTP server, cid=39, mspi_on_xmit, lost connection
Mar 4 10:03:56.985: mspi_on_xmit: cid=0x27, lost connection
Mar 4 10:03:56.985: disc text=no route to destination (3): SMTP client engine
 lost connection  !--- The statement "no route to destination" is a little misleading as a cause
code. Mar 4 10:03:56.985: mspi_xmit: cid=0x27, st=ABORTING, src_cid=0x28 Mar 4 10:03:56.985:
discarding buffer !--- Several lines of mspi_xmit debugs that were identical to the lines above
!--- and below this note have been suppressed. Mar 4 10:03:56.989: mspi_xmit: cid=0x27,
st=ABORTING, src_cid=0x28 Mar 4 10:03:56.993: discarding buffer Mar 4 10:03:56.993:
%LAPP_ON_MSGS-6-LAPP_ON_CAUSE_NO_ESMTP_CONNECT: ESMTP client did not connect or lost connection
to remote server Mar 4 10:03:56.993: mspi_bridge_drop: cid=0x27, dst cid=0x28, st=ABORTING,
onramp Mar 4 10:03:56.993: mspi_disconnect: cid=0x27, st=DISCONNECTING, cause=no route to
destination (3) Mar 4 10:03:56.993: mspi_on_call_hist: cid=0x27, cause=no route to destination
(3): SMTP client engine lost connection Mar 4 10:03:56.993: disposing smtp ctx Mar 4
10:03:56.993: mspi_free_ccb: mmccb allocated=1, inserted=0 vdtl-5300-7a#
```

透過此偵錯，同樣的問題可以更清楚看到：

```
vdtl-5300-7a# debug mta send all
Mar 5 16:48:46.420: esmtp_client_engine_open: from=FAX=@, to=andy@testlab-t37.com
Mar 5 16:48:46.420: esmtp_client_engine_add_headers: from_comment=Fax
Mar 5 16:48:46.792: esmtp_client_work: socket 0 attempting to connect to IP
 address 172.18.106.36
Mar 5 16:48:46.792: esmtp_client_work: socket 0 readable for first time
Mar 5 16:48:46.792: esmtp_client_work: socket 0 readable for first time
Mar 5 16:48:46.796: (C)R: 220 testlab-smtp.testlab-t37.com Microsoft ESMTP MAIL Service,
 Version: 5.0.2195.4453 ready at Tue, 5 Mar 2002 16:48:12 -0500 !--- This is the SMTP server
information displayed with the login. Mar 5 16:48:46.796: (C)S: EHLO vdtl-5300-7a.testlab-
```

t37.com
Mar 5 16:48:47.208: (C)R: 250-testlab-smtp.testlab-t37.com Hello [15.80.7.11]
!--- All the responses through the R: 250 OK are in response to the EHLO command from !--- the sender (the 5300). These are the capabilities of the receiver. Mar 5 16:48:47.208: (C)R: 250-TURN Mar 5 16:48:47.208: (C)R: 250-ATRN Mar 5 16:48:47.208: (C)R: 250-SIZE Mar 5 16:48:47.208: (C)R: 250-ETRN Mar 5 16:48:47.212: (C)R: 250-PIPELINING Mar 5 16:48:47.212: (C)R: 250-DSN Mar 5 16:48:47.212: (C)R: 250-ENHANCEDSTATUSCODES Mar 5 16:48:47.212: (C)R: 250-8bitmime Mar 5 16:48:47.212: (C)R: 250-BINARYMIME Mar 5 16:48:47.212: (C)R: 250-CHUNKING Mar 5 16:48:47.212: (C)R: 250-VRFY Mar 5 16:48:47.212: (C)R: 250-X-EXPS GSSAPI NTLM LOGIN Mar 5 16:48:47.212: (C)R: 250-X-EXPS=LOGIN Mar 5 16:48:47.212: (C)R: 250-AUTH GSSAPI NTLM LOGIN Mar 5 16:48:47.212: (C)R: 250-AUTH=LOGIN Mar 5 16:48:47.212: (C)R: 250-X-LINK2STATE Mar 5 16:48:47.212: (C)R: 250-XEXCH50 Mar 5 16:48:47.212: (C)R: 250 OK Mar 5 16:48:47.212: **(C)S: MAIL FROM:**

!--- This is the **mail from** command.

Mar 5 16:48:47.708: **(C)R: 501 5.5.4 Invalid Address** *!--- The server does not like the address.* Mar 5 16:48:47.708: **esmtp_client_work: error in response to MAIL FROM** *!--- This tells exactly where the problem ocurred in the SMTP exchange.* Mar 5 16:48:47.708: esmtp_client_work: ERROR, socket=0 Mar 5 16:49:15.132: %MSPI-4-MSPI_NO_SMTP_SEND: MSPI- Could not send data to the SMTP server, cid=96, mspi_on_xmit, lost connection Mar 5 16:49:15.132: %LAPP_ON_MSGS-6-LAPP_ON_CAUSE_NO_ESMTP_CONNECT: ESMTP client did not connect or lost connection to remote server Mar 5 16:49:15.208: esmtp_client_work: Freeing ctx=0x62616C4C Mar 5 16:49:15.208: esmtp_client: returned from work, context freed

未配置伺服器

```
fax receive called-subscriber 8913180
fax interface-type fax-mail
mta send subject Fax from On-Ramp GW vdlt-5300-7a
mta send postmaster administrator@testlab-t37.com
mta send mail-from hostname vdtl-5300-7a.testlab-t37.com
mta send mail-from username $s$
mta receive maximum-recipients 0

vdtl-5300-7a#
Mar 4 10:46:48.703: mspi_setup_req: for cid=0x3F
Mar 4 10:46:48.703: %MSPI-1-MSPI_BAD_CONFIG: MSPI-bad configuration, mspi_setup_req:
 NULL server ip address
Mar 4 10:46:48.703: mspi_setup_req: NULL server address
Mar 4 10:46:48.703: %LAPP_ON_MSGS-6-LAPP_ON_CAUSE_NO_ESMTP_CONNECT: ESMTP client
 did not connect or lost connection to remote server
vdtl-5300-7a#
```

已配置伺服器，但不存在到伺服器的IP路由

vdtl-5300-7a# **debug mspi send**
Mail SPI send debugging is on
vdtl-5300-7a#
Mar 20 09:35:27.126: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510
Mar 20 09:35:29.306: mspi_setup_req: for cid=0x141
Mar 20 09:35:29.306: envelope_from=**FAX=8915510@vdtl-5300-7a.testlab-t37.com**
Mar 20 09:35:29.310: envelope_to=**FAX=8913144@testlab-t37.com**
Mar 20 09:35:30.310: mspi_chk_connect: cid=0x141, cnt=0,
Mar 20 09:35:30.310: SMTP is in the error state...
Mar 20 09:35:30.310: **disc text=no route to destination (3): SMTP client open failed**
Mar 20 09:35:30.310: **Still waiting for the SMTP connection.....** *!--- You can tell that the SMTP connection was never established.* Mar 20 09:35:30.310: **%LAPP_ON_MSGS-6-LAPP_ON_CAUSE_NO_ESMTP_CONNECT: ESMTP client**

```
 did not connect or lost connection to remote server
Mar 20 09:35:30.310: mspi_disconnect: cid=0x141, st=DISCONNECTING, cause=no route
 to destination (3)  !--- This cause code seems to be an accurate description of the problem.
Mar 20 09:35:30.310: mspi_on_call_hist: cid=0x141, cause=no route to destination (3):
 SMTP client open failed
Mar 20 09:35:30.310: disposing smtp ctx
Mar 20 09:35:30.310: mspi_free_ccb: mmccb allocated=1, inserted=0
Mar 20 09:35:36.006: %ISDN-6-DISCONNECT: Interface Serial0:18 disconnected from 8915510,
 call lasted 14 seconds
vdtl-5300-7a#
```

注意：路由器沒有向MS Exchange伺服器傳送完全限定域名(FQDN)，並且它不喜歡語法。這是因為路由器在新增「ip domain-name *domain*」後需要重新載入

```
vdtl-5300-7a# debug mmoip send email andy@testlab-t37.com
vdtl-5300-7a#
Mar 28 09:55:16.768: %SYS-5-CONFIG_I: Configured from console by console
Mar 28 09:55:17.936: esmtp_client_engine_open: from=testing@vdtl-5300-7a.testlab-t37.com,
 to=andy@testlab-t37.com
Mar 28 09:55:17.940: esmtp_client_engine_add_headers: from_comment=mspi Test User
Mar 28 09:55:18.072: esmtp_client_work: socket 0 attempting to connect to IP
 address 172.18.106.36
Mar 28 09:55:18.072: esmtp_client_work: socket 0 readable for first time
Mar 28 09:55:18.072: esmtp_client_work: socket 0 readable for first time
Mar 28 09:55:18.076: (C)R: 220 testlab-smtp.testlab-t37.com Microsoft ESMTP MAIL Service,
 Version: 5.0.2195.4453 ready at Thu, 28 Mar 2002 09:54:02 -0500
Mar 28 09:55:18.076: (C)S: EHLO vdtl-5300-7a.  !--- The Exchange server does not like the
trailing dot (.). Mar 28 09:55:18.484: (C)R: 501 5.5.4 Invalid Address
Mar 28 09:55:18.484: esmtp_client_work: EHLO failed; will try sending HELO
Mar 28 09:55:18.484: (C)S: HELO vdtl-5300-7a.
Mar 28 09:55:18.984: (C)R: 501 5.5.4 Invalid Address
Mar 28 09:55:18.984: esmtp_client_work: error in response to HELO
Mar 28 09:55:18.984: esmtp_client_work: ERROR, socket=0
Mar 28 09:55:18.984: esmtp_client_work: Freeing ctx=0x62661F18
Mar 28 09:55:18.988: esmtp_client: returned from work, context freed
vdtl-5300-7a#
```

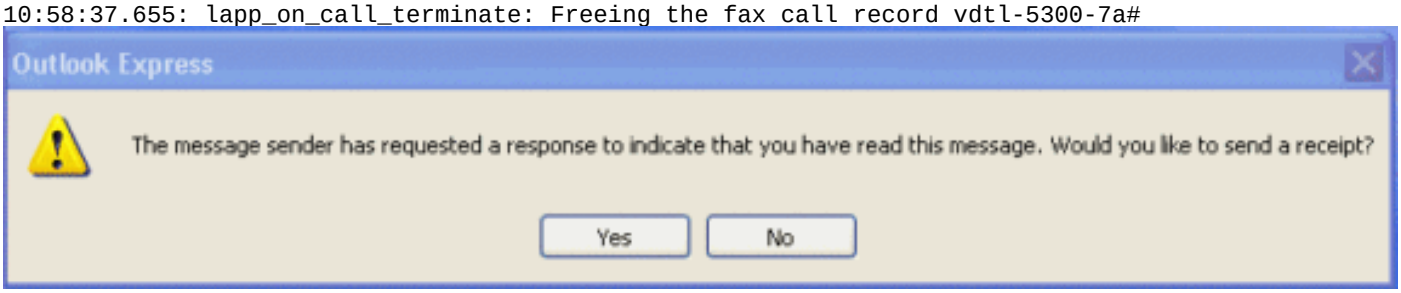
工作調試

以下debug命令用於OnRamp的SMTP端：

```
vdtl-5300-7a# debug foip on-ramp
FOIP On ramp faxmail debugging is on
vdtl-5300-7a#
Mar 18 10:57:50.995: lapp_on_application: Incoming Event: (15 = CC_EV_CALL_HANDOFF),
 CID(216), DISP(0)
Mar 18 10:57:50.995: lapp_on_call_handoff: Authentication enabled = FALSE
Mar 18 10:57:50.995: lapp_on_call_handoff: Authentication ID = 0
Mar 18 10:57:50.995: lapp_on_call_handoff: Authentication ID source = IVR or unknown
Mar 18 10:57:50.999: lapp_on_call_handoff: Authentication status = SUCCESS
Mar 18 10:57:50.999: lapp_on_call_handoff: Accounting enabled = FALSE
Mar 18 10:57:50.999: lapp_on_call_handoff: Accounting method list = fax
Mar 18 10:57:50.999: lapp_on_call_handoff: Mailto Address =
Mar 18 10:57:50.999: lapp_on_conference_vtsp_fmsp: Begin conferencing VTSP and FMSP...
Mar 18 10:57:50.999: lapp_on_change_state: old state(0) new state(1) !--- HANDOFF to
VTSP_FMSP_CONFERENCING Mar 18 10:57:51.003: lapp_on_application: Incoming Event: (29 =
CC_EV_CONF_CREATE_DONE), CID(216), DISP(0) Mar 18 10:57:51.003: lapp_on_application: Current
call state = 1 Mar 18 10:57:51.003: lapp_on_conference_created: The VTSP and the FMSP are
conferenced
Mar 18 10:57:51.003: lapp_on_conference_created: Wait for FMSP call detail event
Mar 18 10:57:51.003: lapp_on_change_state: old state(1) new state(2) !--- VTSP_FMSP_CONFERENCING
```

to FMSP_CALL_DETAIL Mar 18 10:57:57.075: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510 Mar 18 10:57:59.135: lapp_on_application: Incoming Event: (33 = CC_EV_FROM_FMSP_ON_CALL_DETAIL), CID(217), DISP(0) Mar 18 10:57:59.139: lapp_on_application: Current call state = 2 Mar 18 10:57:59.139: lapp_on_msp_event: Incoming call detail has arrived from the FMSP Mar 18 10:57:59.139: lapp_on_setup_mspi: Prep MSPI ccCallSetupRequest... Mar 18 10:57:59.139: lapp_on_setup_mspi: **Envelope from: FAX=8915510@vdtl-5300-7a.testlab-t37.com**
Mar 18 10:57:59.139: lapp_on_setup_mspi: **Envelope to: FAX=8913144@testlab-t37.com**
Mar 18 10:57:59.139: lapp_on_setup_mspi: rfc822_to_comment: 8913144
Mar 18 10:57:59.139: lapp_on_setup_mspi: **Faxmail subject: Fax from On-Ramp GW vdlt-5300-7a [DNIS=8913144][ANI=8915510]**
Mar 18 10:57:59.139: lapp_on_setup_mspi: **Disposition notification to: admin@testlab-t37.com**
!--- A read receipt is sent to admin@testlab-t37.com if the reader so chooses. Mar 18 10:57:59.139: lapp_on_setup_mspi: Originator's TSI = rfc822_from_comment = Fax Mar 18 10:57:59.139: lapp_on_setup_mspi: Auth/Account ID = 0 Mar 18 10:57:59.139: lapp_on_setup_mspi: Do ccCallSetupRequest to MSPI Mar 18 10:57:59.139: lapp_on_conference_fmsp_dmsp: Starting conference with FMSP and DMSP Mar 18 10:57:59.139: lapp_on_conference_fmsp_dmsp: **tiff file created = 2002:03:18 10:57:59**
Mar 18 10:57:59.139: lapp_on_change_state: old state(2) new state(3) *!--- FMSP_CALL_DETAIL to FMSP_DMSP_CONFERENCING* Mar 18 10:57:59.139: lapp_on_application: Incoming Event: (29 = CC_EV_CONF_CREATE_DONE), CID(217), DISP(0) Mar 18 10:57:59.139: lapp_on_application: Current call state = 3 Mar 18 10:57:59.139: lapp_on_conference_created: The FMSP and the DMSP are conferenced Mar 18 10:57:59.139: lapp_on_conference_created: Sending CC_EV_TO_FMSP_ON_RECEIVE_ENABLE to FMSP Mar 18 10:57:59.139: lapp_on_change_state: old state(3) new state(4) *!--- FMSP_DMSP_CONFERENCING to FMSP_PAGE_ACCEPT_REQUESTED* Mar 18 10:58:00.139: lapp_on_application: Incoming Event: (8 = CC_EV_CALL_CONNECTED), CID(218), DISP(0) Mar 18 10:58:00.139: lapp_on_application: Current call state = 4 Mar 18 10:58:00.139: lapp_on_call_connected: **Call connected event received.... - CID(218)**
Mar 18 10:58:00.139: lapp_on_call_connected: MSPI call connected - CID(218)
Mar 18 10:58:00.139: lapp_on_call_connected: Start conferencing the DMSP and the MSPI
Mar 18 10:58:00.139: lapp_on_application: Incoming Event: (29 = CC_EV_CONF_CREATE_DONE), CID(219), DISP(0)
Mar 18 10:58:00.139: lapp_on_application: Current call state = 4
Mar 18 10:58:11.539: lapp_on_application: Incoming Event: (36 = CC_EV_FROM_FMSP_ON_PAGE_ACCEPT_REQUESTED), CID(217), DISP(0)
Mar 18 10:58:11.539: lapp_on_application: Current call state = 4
Mar 18 10:58:11.539: lapp_on_msp_event: **Page accept request arrived from fmsp**
Mar 18 10:58:11.539: lapp_on_msp_event: **Sending page accept event to the FMSP**
Mar 18 10:58:11.539: lapp_on_msp_event: **Pages processed = 1**
!--- The first fax page is received. Mar 18 10:58:11.539: lapp_on_change_state: old state(4) new state(4) Mar 18 10:58:16.015: lapp_on_application: Incoming Event: (37 = CC_EV_FROM_DMSP_ON_PAGE_PROCESSED), CID(219), DISP(146) Mar 18 10:58:16.015: lapp_on_application: Current call state = 4 Mar 18 10:58:16.015: lapp_on_msp_event: Page processed event arrived from the DMSP Mar 18 10:58:16.015: lapp_on_change_state: old state(4) new state(4) Mar 18 10:58:30.719: lapp_on_application: Incoming Event: (36 = CC_EV_FROM_FMSP_ON_PAGE_ACCEPT_REQUESTED), CID(217), DISP(0) Mar 18 10:58:30.719: lapp_on_application: Current call state = 4 Mar 18 10:58:30.719: lapp_on_msp_event: **Page accept request arrived from fmsp**
Mar 18 10:58:30.719: lapp_on_msp_event: **Sending page accept event to the FMSP**
Mar 18 10:58:30.719: lapp_on_msp_event: **Pages processed = 2**
!--- The second fax page is received. Mar 18 10:58:30.719: lapp_on_change_state: old state(4) new state(4) Mar 18 10:58:32.199: lapp_on_application: Incoming Event: (37 = CC_EV_FROM_DMSP_ON_PAGE_PROCESSED), CID(219), DISP(0) Mar 18 10:58:32.199: lapp_on_application: Current call state = 4 Mar 18 10:58:32.199: lapp_on_msp_event: Page processed event arrived from the DMSP Mar 18 10:58:32.199: lapp_on_change_state: old state(4) new state(4) Mar 18 10:58:34.355: lapp_on_application: Incoming Event: (11 = CC_EV_CALL_DISCONNECTED), CID(218), DISP(0) Mar 18 10:58:34.355: lapp_on_application: Current call state = 4 Mar 18 10:58:34.355: lapp_on_call_disconnected: Call Disconnected - CID= 218 cause= 0x10 call_state= 4 Mar 18 10:58:34.355: lapp_on_call_disconnected: MSPI disconnected Mar 18 10:58:34.355: lapp_on_call_disconnected: **Faxmail acknowledged by remote SMTP server**
Mar 18 10:58:34.355: lapp_on_change_state: old state(4) new state(7) *!--- FMSP_PAGE_ACCEPT_REQUESTED to CONFERENCE_DESTROYING* Mar 18 10:58:34.355: lapp_on_conference_cleanup: Destroying conferences... Mar 18 10:58:34.355: lapp_on_conference_cleanup: **Destroying conference for VTSP & FMSP**
Mar 18 10:58:34.355: lapp_on_conference_cleanup: **Destroying conference for FMSP & DMSP**

```
Mar 18 10:58:34.355: lapp_on_conference_cleanup: Destroying conference for DMSP & MSPI
Mar 18 10:58:34.355: lapp_on_application: Incoming Event: (30 = CC_EV_CONF_DESTROY_DONE),
 CID(217), DISP(0)
Mar 18 10:58:34.355: lapp_on_application: Current call state = 7
Mar 18 10:58:34.355: lapp_on_conference_destroyed: FMSP/DMSP conference destroyed
Mar 18 10:58:34.355: lapp_on_conference_destroyed: Conference destroyed..... confID = 150
Mar 18 10:58:34.355: lapp_on_application: Incoming Event: (30 = CC_EV_CONF_DESTROY_DONE),
 CID(219), DISP(0)
Mar 18 10:58:34.355: lapp_on_application: Current call state = 7
Mar 18 10:58:34.355: lapp_on_conference_destroyed: DMSP/MSPI conference destroyed
Mar 18 10:58:34.355: lapp_on_conference_destroyed: Conference destroyed..... confID = 151
Mar 18 10:58:34.355: lapp_on_application: Incoming Event: (30 = CC_EV_CONF_DESTROY_DONE),
 CID(216), DISP(0)
Mar 18 10:58:34.355: lapp_on_application: Current call state = 7
Mar 18 10:58:34.355: lapp_on_conference_destroyed: VTSP/FMSP conference destroyed
Mar 18 10:58:34.355: lapp_on_conference_destroyed: Conference destroyed..... confID = 149
Mar 18 10:58:34.355: lapp_on_change_state: old state(7) new state(8)  !--- CONFERENCE_DESTROYING
to DISCONNECTING Mar 18 10:58:34.355: lapp_on_conference_destroyed: All conferences are
destroyed. Mar 18 10:58:34.355: lapp_on_change_state: old state(8) new state(8) Mar 18
10:58:34.355: lapp_on_call_leg_cleanup: Sending disconnect for FMSP Mar 18 10:58:34.359:
lapp_on_call_leg_cleanup: Sending disconnect for DMSP Mar 18 10:58:34.359: lapp_on_application:
Incoming Event: (12 = CC_EV_CALL_DISCONNECT_DONE), CID(219), DISP(0) Mar 18 10:58:34.359:
lapp_on_application: Current call state = 8 Mar 18 10:58:34.359: lapp_on_disconnect_done:
Received call disconnect done ... callID = 219 Mar 18 10:58:34.359: lapp_on_disconnect_done:
DMSP disconnect done Mar 18 10:58:34.359: lapp_on_disconnect_done: Sending disconnect for MSPI
Mar 18 10:58:34.359: lapp_on_application: Incoming Event: (12 = CC_EV_CALL_DISCONNECT_DONE),
CID(218), DISP(0) Mar 18 10:58:34.359: lapp_on_application: Current call state = 8 Mar 18
10:58:34.359: lapp_on_disconnect_done: Received call disconnect done ... callID = 218 Mar 18
10:58:34.359: lapp_on_disconnect_done: MSPI disconnect done Mar 18 10:58:34.363:
lapp_on_application: Incoming Event: (12 = CC_EV_CALL_DISCONNECT_DONE), CID(217), DISP(0) Mar 18
10:58:34.363: lapp_on_application: Current call state = 8 Mar 18 10:58:34.363:
lapp_on_disconnect_done: Received call disconnect done ... callID = 217 Mar 18 10:58:34.363:
lapp_on_disconnect_done: FMSP disconnect done Mar 18 10:58:34.363: lapp_on_disconnect_done:
Sending disconnect for VTSP Mar 18 10:58:36.627: %ISDN-6-DISCONNECT: Interface Serial0:18
disconnected from 8915510 , call lasted 45 seconds Mar 18 10:58:37.647: lapp_on_application:
Incoming Event: (28 = CC_EV_CALL_FEATURE), CID(216), DISP(0) Mar 18 10:58:37.647:
lapp_on_application: Current call state = 8 Mar 18 10:58:37.647: lapp_on_event_unsupported:
Unsupported event received--- Mar 18 10:58:37.647: lapp_on_event_unsupported:
EV(28=CC_EV_CALL_FEATURE), CID(216), disp(0) Mar 18 10:58:37.647: lapp_on_event_unsupported:
Current call state = 8 Mar 18 10:58:37.651: lapp_on_application: Incoming Event: (12 =
CC_EV_CALL_DISCONNECT_DONE), CID(216), DISP(0) Mar 18 10:58:37.651: lapp_on_application: Current
call state = 8 Mar 18 10:58:37.651: lapp_on_disconnect_done: Received call disconnect done ...
callID = 216
Mar 18 10:58:37.651: lapp_on_disconnect_done: VTSP disconnect done
Mar 18 10:58:37.651: lapp_on_disconnect_done: All the calls are now void or disconnected
Mar 18 10:58:37.651: lapp_on_change_state: old state(8) new state(9)!--- DISCONNECTING to
TERMINAL Mar 18 10:58:37.651: lapp_on_call_terminate: Freeing the IVR call handoff record Mar 18
10:58:37.655: lapp_on_call_terminate: Freeing the fax call record vdtl-5300-7a#
```



接收電子郵件的客戶端開啟帶有MDN集的電子郵件時，會看到一個與上述類似的視窗。請求者收到的回覆以電子郵件形式傳送給使用者，郵件文本為：「這是您在2002年3月18日上午10:58傳送到「8913144」<Fax=8913144@testlab-t37.com>的電子郵件的回執。此收據驗證郵件是否在2002年3月18日上午11:07顯示在收件人的電腦上。」

```
vdtl-5300-7a# debug mta send all
All email send debugging is on
vdtl-5300-7a#
Mar 18 14:50:46.278: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510
Mar 18 14:50:48.474: esmtp_client_engine_open:
 from=FAX=8915510@vdtl-5300-7a.testlab-t37.com, to=FAX=8913144@testlab-t37.com
Mar 18 14:50:48.474: esmtp_client_engine_add_headers: from_comment=Fax
Mar 18 14:50:48.702: esmtp_client_work: socket 0 attempting to connect to
 IP address 172.18.106.36
Mar 18 14:50:48.702: esmtp_client_work: socket 0 readable for first time
Mar 18 14:50:48.702: esmtp_client_work: socket 0 readable for first time
Mar 18 14:50:48.706: (C)R: 220 testlab-smtp.testlab-t37.com Microsoft ESMTP MAIL Service,
 Version: 5.0.2195.4453 ready at Mon, 18 Mar 2002 14:49:51 -0500
Mar 18 14:50:48.706: (C)S: EHLO vdtl-5300-7a.testlab-t37.com
Mar 18 14:50:49.166: (C)R: 250-testlab-smtp.testlab-t37.com Hello [15.80.7.11]
Mar 18 14:50:49.166: (C)R: 250-TURN
Mar 18 14:50:49.170: (C)R: 250-ATRN
Mar 18 14:50:49.170: (C)R: 250-SIZE
Mar 18 14:50:49.170: (C)R: 250-ETRN
Mar 18 14:50:49.170: (C)R: 250-PIPELINING
Mar 18 14:50:49.170: (C)R: 250-DSN
Mar 18 14:50:49.170: (C)R: 250-ENHANCEDSTATUSCODES
Mar 18 14:50:49.170: (C)R: 250-8bitmime
Mar 18 14:50:49.170: (C)R: 250-BINARYMIME
Mar 18 14:50:49.170: (C)R: 250-CHUNKING
Mar 18 14:50:49.170: (C)R: 250-VRFY
Mar 18 14:50:49.170: (C)R: 250-X-EXPS GSSAPI NTLM LOGIN
Mar 18 14:50:49.170: (C)R: 250-X-EXPS=LOGIN
Mar 18 14:50:49.170: (C)R: 250-AUTH GSSAPI NTLM LOGIN
Mar 18 14:50:49.170: (C)R: 250-AUTH=LOGIN
Mar 18 14:50:49.170: (C)R: 250-X-LINK2STATE
Mar 18 14:50:49.170: (C)R: 250-XEXCH50
Mar 18 14:50:49.170: (C)R: 250 OK
Mar 18 14:50:49.170: (C)S: MAIL FROM:




Mar 18 14:50:49.666: (C)R: 250 2.1.0 FAX=8915510@vdtl-5300-7a.testlab-t37.com....Sender OK
Mar 18 14:50:49.666: (C)S: RCPT TO:




       ORCPT=rfc822;FAX+3D8915510@vdtl-5300-7a.testlab-t37.com
Mar 18 14:50:50.170: (C)R: 250 2.1.5 FAX=8913144@testlab-t37.com
Mar 18 14:50:50.698: (C)R: 354 Start mail input; end with




Mar 18 14:50:50.698: (C)S: Received: by vdtl-5300-7a.testlab-t37.com for Mar 18 14:51:05.706:
esmtp_client_work: writing lingering data for socket 0 Mar 18 14:51:05.714: esmtp_client_work:
writing lingering data for socket 0 Mar 18 14:51:14.726: esmtp_client_work: writing lingering
data for socket 0 Mar 18 14:51:14.734: esmtp_client_work: writing lingering data for socket 0
Mar 18 14:51:14.738: (C)S: --yradnuoB=_008B2002145048474.vdtl-5300-7atestlab-t37.com-- Mar 18
14:51:14.738: esmtp_client_work: Sending terminating dot ...(socket=0) Mar 18 14:51:14.738:
(C)S: . !--- This is the terminating dot to end the SMTP session. Mar 18 14:51:14.986: (C)R: 250
2.6.0 <008C2002145050698@vdtl-5300-7a.testlab-t37.com> Queued mail for delivery Mar 18
14:51:14.986: (C)S: QUIT
```

```
Mar 18 14:51:15.406: (C)R: 221 2.0.0 testlab-smtp.testlab-t37.com Service closing
 transmission channel
Mar 18 14:51:15.406: esmtp_client_work: Freeing ctx=0x6266946C
Mar 18 14:51:15.406: esmtp_client: returned from work, context freed
Mar 18 14:51:18.938: %ISDN-6-DISCONNECT: Interface Serial0:18 disconnected from 8915510 ,
 call lasted 38 seconds
vdtl-5300-7a#

vdtl-5300-7a# debug dmsp fax-to-doc
Doc MSP fax to doc debugging is on
vdtl-5300-7a#
Mar 18 14:53:03.338: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510
Mar 18 14:53:05.530: docmsp_call_setup_request: callid=227
Mar 18 14:53:05.530: docmsp_call_setup_request(): ramp data dir=ONRAMP, conf dir=DEST
Mar 18 14:53:05.534: docmsp_caps_ind: call id=227, src=225
Mar 18 14:53:05.534: docmsp_bridge cfid=156, srccid=227, dstcid=225

Mar 18 14:53:05.534: docmsp_bridge(): ramp data dir=ONRAMP, conf dir=DEST, encode out=2
Mar 18 14:53:06.530: docmsp_bridge cfid=157, srccid=227, dstcid=226

Mar 18 14:53:06.530: docmsp_bridge(): ramp data dir=ONRAMP, conf dir=SRC, encode out=2
Mar 18 14:53:11.510: docmsp_xmit: call id src=225, dst=227
Mar 18 14:53:11.510: docmsp_process_rcv_data: call id src=225, dst=227
Mar 18 14:53:12.350: docmsp_xmit: call id src=225, dst=227
!--- Output suppressed. Mar 18 14:53:22.242: docmsp_process_rcv_data: call id src=225, dst=227
Mar 18 14:53:22.242: docmsp_get_msp_event_buffer: Mar 18 14:53:23.082: docmsp_xmit: call id
src=225, dst=227 Mar 18 14:53:23.082: docmsp_process_rcv_data: call id src=225, dst=227 Mar 18
14:53:23.922: docmsp_xmit: call id src=225, dst=227 !--- Output suppressed. Mar 18 14:53:36.950:
docmsp_process_rcv_data: call id src=225, dst=227 Mar 18 14:53:38.430: docmsp_xmit: call id
src=225, dst=227 Mar 18 14:53:38.430: docmsp_process_rcv_data: call id src=225, dst=227 Mar 18
14:53:38.434: docmsp_get_msp_event_buffer: Mar 18 14:53:41.022: docmsp_bdrop cfid=156,
srccid=227, dstcid=225 Mar 18 14:53:41.022: docmsp_bdrop cfid=157, srccid=227, dstcid=226 Mar 18
14:53:41.026: docmsp_call_disconnect: callid=227 Mar 18 14:53:41.026: docmsp_do_call_history:
call id=227 Mar 18 14:53:42.886: %ISDN-6-DISCONNECT: Interface Serial0:18 disconnected from
8915510 , call lasted 45 seconds vdtl-5300-7a#
```

注意：**debug moip send email *address* 命令不會在螢幕上顯示任何內容，但非常有用。**它使用路由器作為SMTP客戶端，向debug命令中給定的地址傳送電子郵件。該電子郵件主題在配置中定義，且來自「mspi測試使用者」。 它包含一個文本附件，其行為「這是通過思科支援的Libretto Faxmail傳送的測試電子郵件。」

以下是OnRamp傳真端的調試：

```
vdtl-5300-7a# debug fmsp send t30
FMSP send t30 debugging is on
vdtl-5300-7a#
Mar 19 14:50:04.604: t30 call4Leg=311, state=1, substate=4
Mar 19 14:50:04.604: received flag of modulation:
0
Mar 19 14:50:04.628: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510
Mar 19 14:50:06.252: msg dump:FF C0 C2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 1E 86 62
Mar 19 14:50:06.252:
Mar 19 14:50:06.252: t30 call4Leg=311, state=1, substate=4
Mar 19 14:50:06.252: received: TSI remote id string: Fax

Mar 19 14:50:06.672: msg dump:FF C8 C1 0 47 E
Mar 19 14:50:06.672:
Mar 19 14:50:06.824: t30 call4Leg=311, state=1, substate=4
Mar 19 14:50:06.824: in response receive WAIT FOR CD
Mar 19 14:50:11.632: t30 call4Leg=311, state=1, substate=6
Mar 19 14:50:11.632: received flag of modulation:
8
```

```
Mar 19 14:50:19.304: t30 call4Leg=311, state=1, substate=6
Mar 19 14:50:19.304: received flag of modulation:
0
Mar 19 14:50:20.364: msg dump:FF C8 F2
Mar 19 14:50:20.364:
Mar 19 14:50:22.324: t30 call4Leg=311, state=1, substate=6
Mar 19 14:50:22.324: received flag of modulation:
8
Mar 19 14:50:31.643: t30 call4Leg=311, state=1, substate=6
Mar 19 14:50:31.643: received flag of modulation:
0
Mar 19 14:50:32.683: msg dump:FF C8 F4
Mar 19 14:50:32.683:
Mar 19 14:50:33.155: t30 call4Leg=311, state=0, substate=6
Mar 19 14:50:33.155: fax session aborted by aplication
Mar 19 14:50:37.295: %ISDN-6-DISCONNECT: Interface Serial0:18 disconnected from 8915510 ,
 call lasted 38 seconds
vdtl-5300-7a#
```

```
vdtl-5300-7a#debug fmsp receive t30
FMSP receive t30 debugging is on
vdtl-5300-7a#
Mar 19 14:46:26.536: t30 call4Leg=307, state=1, substate=3  !--- state=PHASE_B_RECEIVE
substate=TX_DIS_DTC_BLOCK Mar 19 14:46:26.536: CSI_PACKET(8913180) !--- The CSI option, which
shows that the called number is 8913180, is !--- controlled by the fax receive called-subscriber
configuration.

Mar 19 14:46:26.536: t30 call4Leg=307, state=1, substate=3
Mar 19 14:46:26.536: DIS_PACKET(speed: 5, resolution: 1, encoding:
1
Mar 19 14:46:26.536: t30 call4Leg=307, state=1, substate=4   !--- Moved to substate
RX_DCS_DTC_BLOCK. Mar 19 14:46:26.536: fax2_response_receive: PROCESSING Mar 19 14:46:29.452:
t30 call4Leg=307, state=1, substate=4 Mar 19 14:46:29.452: fax2_response_receive: PROCESSING Mar
19 14:46:29.476: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510 Mar 19
14:46:30.736: t30 call4Leg=307, state=1, substate=3 Mar 19 14:46:30.736: CSI_PACKET(8913180)
Mar 19 14:46:30.736: t30 call4Leg=307, state=1, substate=3
Mar 19 14:46:30.736: DIS_PACKET(speed: 5, resolution: 1, encoding:
1   !--- speed=14400, resolution=, encoding=modified read Mar 19 14:46:30.736: t30 call4Leg=307,
state=1, substate=4 Mar 19 14:46:30.736: fax2_response_receive: PROCESSING Mar 19 14:46:31.100:
t30 call4Leg=307, state=1, substate=4 Mar 19 14:46:31.100: fax2_response_receive: PROCESSING Mar
19 14:46:31.100: msg dump:FF C0 C2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 1E 86 62 Mar 19
14:46:31.100: Mar 19 14:46:31.100: t30 call4Leg=307, state=1, substate=4 Mar 19 14:46:31.100:
received: TSI remote id string: Fax

Mar 19 14:46:31.100: t30 call4Leg=307, state=1, substate=4
Mar 19 14:46:31.100: fax2_response_receive: PROCESSING
Mar 19 14:46:31.532: t30 call4Leg=307, state=1, substate=4
Mar 19 14:46:31.532: fax2_response_receive: PROCESSING
Mar 19 14:46:31.532: msg dump:FF C8 C1 0 47 E
Mar 19 14:46:31.532:
Mar 19 14:46:31.532: t30 call4Leg=307, state=1, substate=4
Mar 19 14:46:31.532: fax2_response_receive: PROCESSING
Mar 19 14:46:31.672: t30 call4Leg=307, state=1, substate=4
Mar 19 14:46:31.672: in response receive WAIT FOR CD
Mar 19 14:46:31.672: t30 call4Leg=307, state=1, substate=9   !--- The substate is changed to
RX_TCF. Mar 19 14:46:31.672: received DCS_PACKET, BR: 9,  !--- BR=v.21 14400 resolution: 1,
encoding: 1, remote_id_string: Fax
Mar 19 14:46:31.672: t30 call4Leg=307, state=1, substate=10  !--- The substate is changed to
WAIT_FOR_FDR. Mar 19 14:46:31.672: wait for ready for data from application Mar 19 14:46:31.672:
t30 call4Leg=307, state=1, substate=12 !--- The substate is changed to TX_TCF_RESPONSE. Mar 19
14:46:31.672: send CFR_PACKET
Mar 19 14:46:31.672: t30 call4Leg=307, state=1, substate=6   !--- The substate is changed to
CONFIGURE_RX_DATA. Mar 19 14:46:31.672: fax2_configure_rx_data: STILL_LOOKING, T2 timer not
```

expired Mar 19 14:46:36.472: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:36.472: fax2_configure_rx_data: **DETECTED_DATA**
Mar 19 14:46:36.472: t30 call4Leg=307, state=2, substate=43 *!--- state = PHASE_C_RECEIVE, substate=RX_FIRST_DATA_BYTE - starting to RX page data...* Mar 19 14:46:36.472: No data yet Mar 19 14:46:43.872: t30 call4Leg=307, state=2, substate=14 *!--- The substate is changed to RX_DATA.*
Mar 19 14:46:43.872: **end of page**
Mar 19 14:46:43.872: t30 call4Leg=307, state=1, substate=6 *!--- The substate is changed to CONFIGURE_RX_DATA.* Mar 19 14:46:43.872: fax2_configure_rx_data: STILL_LOOKING, T2 timer not expired Mar 19 14:46:43.872: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:43.872: fax2_configure_rx_data: STILL_LOOKING, T2 timer not expired Mar 19 14:46:44.140: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:44.140: fax2_configure_rx_data: DETECTED_COMMAND Mar 19 14:46:44.140: t30 call4Leg=307, state=1, substate=7 *!--- The substate is changed to RX_COMMAND.* Mar 19 14:46:44.140: fax2_command_receive: NO_COMMAND, T2 timer not expired Mar 19 14:46:45.200: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:45.200: fax2_command_receive: PROCESSING Mar 19 14:46:45.200: msg dump:FF C8 F2 Mar 19 14:46:45.200: Mar 19 14:46:45.200: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:45.200: fax2_command_receive: PROCESSING Mar 19 14:46:45.352: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:45.352: fax2_command_receive: RECEIVED_COMMAND Mar 19 14:46:45.352: t30 call4Leg=307, state=3, substate=8 *!--- The substate is changed to ROUTE_COMMAND.* Mar 19 14:46:45.352: **received MPS** *!--- Received Multipage Signal.* Mar 19 14:46:45.352: t30 call4Leg=307, state=3, substate=10 *!--- The substate is changed to WAIT_FOR_FDR.* Mar 19 14:46:45.352: waiting for page acceptence by the application Mar 19 14:46:45.352: t30 call4Leg=307, state=3, substate=17 *!--- The substate is changed to SCHEDULE_PP_RESPONSE.* Mar 19 14:46:45.352: **send MCF** *!--- Send a Message Confirmation.* Mar 19 14:46:45.352: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:45.352: fax2_configure_rx_data: STILL_LOOKING, T2 timer not expired Mar 19 14:46:47.172: t30 call4Leg=307, state=1, substate=6

!--- Now this must be done again, starting from the page data, because two pages !--- are being sent. Mar 19 14:46:47.172: fax2_configure_rx_data: DETECTED_DATA Mar 19 14:46:47.172: t30 call4Leg=307, state=2, substate=43 *!--- state = PHASE_C_RECEIVE, substate=RX_FIRST_DATA_BYTE - starting to RX page data...* Mar 19 14:46:47.172: No data yet Mar 19 14:46:56.212: t30 call4Leg=307, state=2, substate=14 *!--- The substate is changed to RX_DATA.* Mar 19 14:46:56.212: end of page Mar 19 14:46:56.212: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:56.212: fax2_configure_rx_data: STILL_LOOKING, T2 timer not expired Mar 19 14:46:56.212: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:56.212: fax2_configure_rx_data: STILL_LOOKING, T2 timer not expired Mar 19 14:46:56.512: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:56.512: fax2_configure_rx_data: DETECTED_COMMAND Mar 19 14:46:56.512: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:56.512: fax2_command_receive: NO_COMMAND, T2 timer not expired Mar 19 14:46:57.552: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:57.552: fax2_command_receive: PROCESSING Mar 19 14:46:57.552: msg dump:FF C8 F4 Mar 19 14:46:57.552: Mar 19 14:46:57.552: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:57.552: fax2_command_receive: PROCESSING Mar 19 14:46:57.700: t30 call4Leg=307, state=1, substate=7 Mar 19 14:46:57.700: fax2_command_receive: RECEIVED_COMMAND Mar 19 14:46:57.700: t30 call4Leg=307, state=3, substate=8 Mar 19 14:46:57.700: **received EOP**
!--- Received End of Procedure. Mar 19 14:46:57.700: t30 call4Leg=307, state=3, substate=10 Mar 19 14:46:57.700: waiting for page acceptence by the application Mar 19 14:46:57.700: t30 call4Leg=307, state=3, substate=17 Mar 19 14:46:57.700: **send MCF**
!--- Send a Message Confirmation. Mar 19 14:46:57.700: t30 call4Leg=307, state=1, substate=6 Mar 19 14:46:57.704: fax2_configure_rx_data: STILL_LOOKING, T2 timer not expired Mar 19 14:46:58.140: t30 call4Leg=307, state=0, substate=6 *!--- state=PHASE_IDLE* Mar 19 14:46:58.140: fax session aborted by aplication Mar 19 14:47:02.188: %ISDN-6-DISCONNECT: Interface Serial0:18 disconnected from 8915510 , call lasted 38 seconds vdtl-5300-7a#

vdtl-5300-7a# **debug fax relay t30 called-number 8913144**
Debugging fax relay t30 to 8913144
vdtl-5300-7a#
Mar 19 14:40:19.134: 0:D:302 1205778176 fr-entered (10ms)
Mar 19 14:40:22.498: 0:D:302 1205781540 fr-msg-tx **CSI**
Mar 19 14:40:23.826: 0:D:302 1205782870 fr-msg-tx **DIS**
Mar 19 14:40:25.070: %ISDN-6-CONNECT: Interface Serial0:18 is now connected to 8915510
Mar 19 14:40:26.146: 0:D:302 1205785190 fr-msg-det **TSI**
Mar 19 14:40:27.026: 0:D:302 1205786070 fr-msg-det **DCS**
Mar 19 14:40:30.558: 0:D:302 1205789600 fr-msg-tx **CFR**

```
Mar 19 14:40:40.766: 0:D:302 1205799810 fr-msg-det MPS
Mar 19 14:40:41.266: 0:D:302 1205800310 fr-msg-tx MCF
Mar 19 14:40:53.098: 0:D:302 1205812140 fr-msg-det EOP
Mar 19 14:40:53.598: 0:D:302 1205812640 fr-msg-tx MCF
Mar 19 14:40:56.390: 0:D:302 1205815430 fr-msg-det DCN
Mar 19 14:40:57.682: %ISDN-6-DISCONNECT: Interface Serial0:18 disconnected from 8915510 ,
 call lasted 38 seconds
Mar 19 14:40:58.518: 0:D:302 1205817560 fr-end-dcn
```

fr-msg-tx indicates T.30 messages that are transmitted by the router
fr-msg-det indicates T.30 messages that are received by the router

如需詳細資訊，請參閱傳真中繼疑難排解指南。

show命令

```
vdtl-5300-7a# show call history fax brief
<ID>: <start>hs.<index> +<connect> +<disc> pid:<peer_id> <direction> <addr>
dur hh:mm:ss tx:<packets>/<bytes> rx:<packets>/<bytes> <disc-cause>(<text>)
IP <ip>:<udp> rtt:<time>ms pl:<play>/<gap>ms lost:<lost>/<early>/<late>
delay:<last>/<min>/<max>ms <codec>
MODEMPASS <method> buf:<fills>/<drains> loss <overall%> <multipkt>/<corrected>
last <buf event time>s dur:<Min>/<Max>s
FR <protocol> [int dlci cid] vad:<y/n> dtmf:<y/n> seq:<y/n>
<codec> (payload size)
ATM <protocol> [int vpi/vci cid] vad:<y/n> dtmf:<y/n> seq:<y/n>
<codec> (payload size)
Telephony <int>: tx:<tot>/<voice>/<fax>ms <codec> noise:<lvl>dBm acom:<lvl>dBm
Proxy <ip>:<audio udp>,<video udp>,<tcp0>,<tcp1>,<tcp2>,<tcp3> endpt: <type>/<manf>
bw: <req>/<act> codec: <audio>/<video>
tx: <audio pkts>/<audio bytes>,<video pkts>/<video bytes>,<t120 pkts>/<t120 bytes>
rx: <audio pkts>/<audio bytes>,<video pkts>/<video bytes>,<t120 pkts>/<t120 bytes>


Telephony call-legs: 3
SIP call-legs: 0
H323 call-legs: 0
Total call-legs: 5
1225 : 374672hs.31 +2 +1367 pid:8913180 Answer 8915510
dur 00:00:13 tx:7/124 rx:104/693 10 :1F (normal call clearing (16):normal,
 unspecified (31): User abort)
Telephony 0:D:61: tx:0/0/0ms 14400 noise:0dBm acom:0dBm

122B : 401714hs.32 +100 +2966 pid:1 Originate andy@testlab-t37.com
dur 00:00:28 tx:50942/0 rx:0/0 10 :0 (normal call clearing (16):)
IP 172.18.106.36 AcceptedMime:0 DiscardedMime:0

1229 : 400917hs.33 +1 +4108 pid:8913180 Answer 8915510
dur 00:00:41 tx:11/164 rx:760/45251 10 :10 (normal call clearing (16):normal
 call clearing (16): Normal conn)
Telephony 0:D:64: tx:0/0/0ms 14400 noise:0dBm acom:0dBm

1230 : 439580hs.34 +100 +2971 pid:1 Originate andy@testlab-t37.com
dur 00:00:28 tx:50942/0 rx:0/0 10 :0 (normal call clearing (16):)
IP 172.18.106.36 AcceptedMime:0 DiscardedMime:0

122E : 438783hs.35 +1 +4109 pid:8913180 Answer 8915510
dur 00:00:41 tx:11/164 rx:761/45256 10 :10 (normal call clearing (16):normal
 call clearing (16): Normal conn)
Telephony 0:D:68: tx:0/0/0ms 14400 noise:0dBm acom:0dBm
```

相關資訊

- T.37 OffRamp傳真
- 透過IP傳輸的傳真T.37儲存和轉送傳真
- 語音技術支援
- 語音和整合通訊產品支援
- Cisco IP電話故障排除
- 技術支援 - Cisco Systems