

# T.37上线管道电传

## 目录

[简介](#)  
[先决条件](#)  
[要求](#)  
[使用的组件](#)  
[规则](#)  
[配置](#)  
[网络图](#)  
[配置参数](#)  
[OnRamp配置](#)  
[可选配置](#)  
[故障排除](#)  
[调试失败](#)  
[工作调试](#)  
[显示命令](#)  
[相关信息](#)

## 简介

“IP T.37传真存储和转发传真”主文档的此部分介绍了OnRamp存储和转发传真。OnRamp T.37是接受传真呼叫、将传真编码为带标记图像文件格式(TIFF)并将该TIFF作为附件发送到电子邮件服务器的过程。

本文档包含使功能正常运行所需的配置。“故障排除”部分将介绍有用的debug命令以及如何解释其含义。网络图部分显示了所用的拓扑。

## 先决条件

### 要求

本文档的具体要求在主节“IP T.37传真存储和转发传真”中指定。

### 使用的组件

本文档不限于特定的软件和硬件版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始(默认)配置。如果您使用的是真实网络,请确保您已经了解所有命令的潜在影响。

## 规则

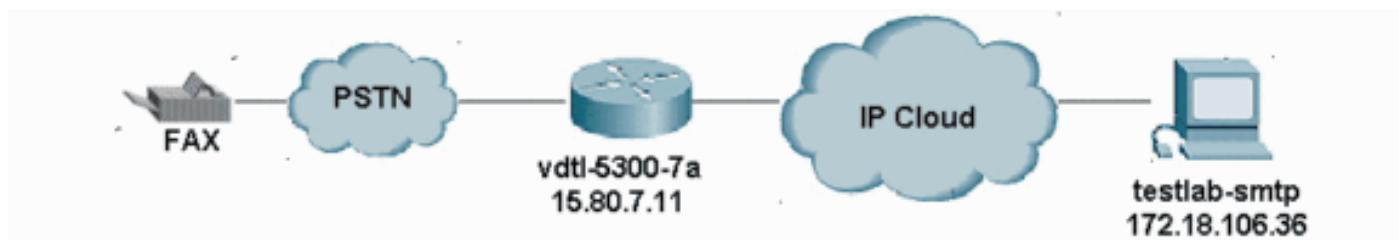
有关文件规则的更多信息请参见“Cisco技术提示规则”。

## 配置

在以下各节中，首先解释与OnRamp传真配置相关的Cisco IOS®软件配置参数，然后显示5300配置，并附上进一步说明，阐明重要命令的功能。在5300配置后面的部分中可以找到一些可选配置参数。

### 网络图

本文档使用下图所示的网络设置。



### 配置参数

必需参数：	
<a href="#">fax interface-type fax-mail</a>	为网关启用T.37功能。需要在5300上重新启动，但不是在5350或5400上重新启动。
<a href="#">MTA发送服务器</a>	这是路由器要通过发送OnRamp电子邮件的简单邮件传输协议(SMTP)服务器的主机名或IP地址。如果没有此配置，路由器就不知道将OnRamp电子邮件发送到何处。有关未配置 <a href="#">服务器的调试</a> 和控制台消息，请参阅“未配置服务器”部分。
<a href="#">mta send postmaster</a>	如果mta sent mail-from选项不评估或未配置，则使用此地址。它被放在“OnRamp发件人”字段中。如果存在mta send mail-from username和mta send mail-from hostname，则此选项为可选选项。单击 <a href="#">此处</a> 以调试失败呼叫的mspi。
<a href="#">IP 域名</a>	用于在HELO消息中使用hostname.domain-name标识电子邮件发件人。配置此命令后，必须重新加载路由

	器。
<a href="#">call application voice onramp</a> <a href="#">flash:app_libretto_onramp.2.0.1.tcl</a>	定义应用程序（在本例中为 onramp）及其位置（在本例中为路由器闪存）的全局名称。
<a href="#">dial-peer voice 8913180</a> <a href="#">pots application onramp</a>	当此拨号对等体匹配时，呼叫应用程序入口匝道。
<a href="#">dial-peer voice 1 mmoip</a> <a href="#">application</a> <a href="#">fax on vfc onramp app</a> <a href="#">out-bound</a>	匹配此IP多媒体邮件 (MMoIP) 对等体时要调用的应用。Cisco IOS 软件中预捆绑的。通过 show call application voice summary 显示。
可选参数：	
<a href="#">mta send mail-from</a> <a href="#">hostname</a>	这是 OnRamp 邮件的“发件人”(From) 字段中要使用的主机名。如果 mta send postmaster 命令不存在，则为必填项。如果使用 mta send mail-from username，则必须配置此项。
<a href="#">mta send mail-from</a> <a href="#">username</a>	这是 OnRamp 电子邮件的“发件人”字段中要使用的发起方。与 mta send mail-from hostname 结合使用，以获取整个“发件人”字段，即 username@hostname。如果 mta send postmaster 命令不存在，则为必填项。如果使用 mta send mail-from hostname，则必须配置此项。
<a href="#">mta send subject</a>	要在 OnRamp 电子邮件的“主题”字段中使用的文本字符串。
<a href="#">mta send with-subject</a>	<ul style="list-style-type: none"> <li>• 附加带关键字 \$s\$ 的主叫方号码。</li> <li>• 附加带关键字 \$d\$ 的被叫方编号。</li> <li>• 附加主叫方号码和被叫方号码，同时附加关键字 both。</li> </ul> <p>要显示调试，请单击 <a href="#">此处</a>。</p>
<a href="#">mta send return-receipt-to</a>	关键字是用户名和主机名。它们一起形成 disposition-notification-to:username@hostname。
拨号对等体语音号码 mmoip mdn	请求通过此 MMoIP 对等体发送的电子邮件请求将消息处

	置通知(MDN)发送到由 <b>mta send return-receipt-to</b> 命令定义的目的地。
<b>拨号对等体语音号mmoip dsn {delay  成功  失败</b>	请求将传送状态通知(DSN)发送到 <b>mta send mail-from</b> 命令定义的目标

## 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 $$
```

```

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 mmoiip 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#

```

## 可选配置

以下是一些可选配置参数。第一个示例显示如何使用传统电子邮件地址配置多个电子邮件帐户，第二个示例显示如何使用被叫方号码为电子邮件地址配置多个电子邮件帐户。

### 示例 1：

```

!
dial-peer
voice 1
mmoip
application
fax_on_vfc_o
nramp_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_o
nramp_app
out-bound

destination-
pattern
8913145

information-
type fax
session
target
mailto:bobby
@testlab-
t37.com
!

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

在此配置中，PRI有两个直接拨入(DID)号码：891-3144 和 891-3145。根据拨打的号码，电子邮件会发送到andy@testlab-t37.com或bobby@testlab-t37.com。

## 示例 2：

!	使用此配置，拨号号码标识服务(DNIS)（被叫方号码）将插入RCPT TO:SMTP命令。这允许客户为每个用户提供OnRamp应用的DID。他们只需在电子邮件服务器上添加别名。Mar 12 15:42:12.947:(C)S:RCPT收件人
---	--

<pre> n fax_on_vfc _onramp_ap p out- bound destinatio n-pattern 8913144 informatio n-type fax session target mailto:\$d\$@testlab- t37.com ! </pre>	<p>: &lt;FAX=8913144@testlab-t37.com&gt;</p>
---	--

**注意：**确保电子邮件别名为FAX=8913144@domain.com而不是8913144@domain.com，否则电子邮件将无法正确传送。

## 故障排除

### 调试失败

**注意：**配置更改在调试上方标注。

```

debug mspisend
!
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
!

```

**注意：**配置中省略了mta send mail-from username命令，mta send postmaster命令也如此。

```

vdtl-5300-7a#
Mar 4 10:03:29.165: mspisetup_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: mspischk_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: mspibridge: cid=0x27, dst cid=0x28, Mar 4 10:03:56.985:
mspixmit: 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, mspion_xmit, lost connection
Mar 4 10:03:56.985: mspion_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: mspixmit: cid=0x27, st=ABORTING, src_cid=0x28 Mar 4 10:03:56.985:
discarding buffer !--- Several lines of mspixmit debugs that were identical to the lines above
!--- and below this note have been suppressed. Mar 4 10:03:56.989: mspixmit: 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: mspibridge_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 vdlt-5300-7a#
```

通过此调试，同样的问题可以更清楚地看到：

```
vdlt-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 vdlt-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 occurred 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
```

## 未配置服务器

```
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 vdlt-5300-7a.testlab-t37.com
mta send mail-from username $s$
mta receive maximum-recipients 0
```

```
vdlt-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
vdlt-5300-7a#
```

## 已配置服务器，但不存在到服务器的IP路由

```
vdtl-5300-7a# debug mspisend
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: mspisetup_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: mspichk_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: mspidisconnect: 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: mspioncallhist: 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: mspifreeccb: 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：路由器未向MS Exchange服务器发送完全限定域名(FQDN)，它不喜欢该语法。这是因为路由器在添加“ip domain-name domain”后需要重新加载**

```
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#
```

## 工作调试

以下debug命令用于OnRamp的SMTP端：

```
vdtl-5300-7a# debug foip on-ramp
FOIP On ramp faxmail debugging is on
vdtl-5300-7a#
```

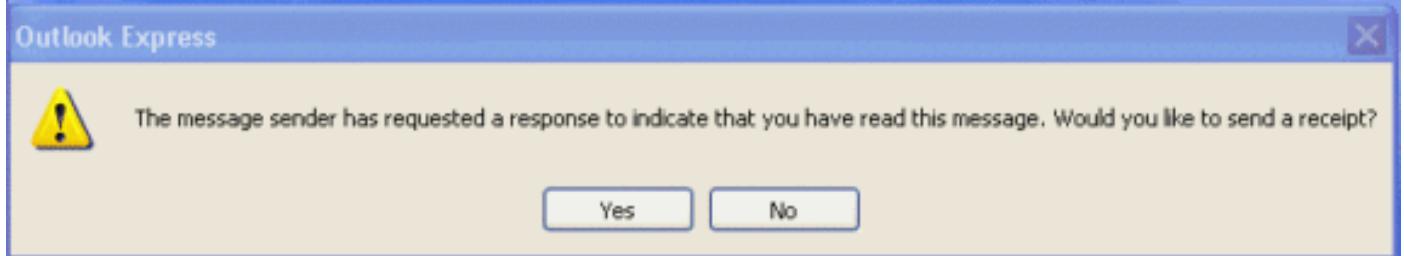
```

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) !--- HANOFF 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_msipi: Prep MSPI ccCallSetupRequest... Mar 18 10:57:59.139: lapp_on_setup_msipi: Envelope from: FAX=8915510@vdtl-5300-7a.testlab-t37.com
Mar 18 10:57:59.139: lapp_on_setup_msipi: Envelope to: FAX=8913144@testlab-t37.com
Mar 18 10:57:59.139: lapp_on_setup_msipi: rfc822_to_comment: 8913144
Mar 18 10:57:59.139: lapp_on_setup_msipi: Faxmail subject: Fax from On-Ramp GW vdlt-5300-7a [DNIS=8913144] [ANI=8915510]
Mar 18 10:57:59.139: lapp_on_setup_msipi: 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_msipi: Originator's TSI = rfc822_from_comment = Fax Mar 18 10:57:59.139: lapp_on_setup_msipi: Auth/Account ID = 0 Mar 18 10:57:59.139: lapp_on_setup_msipi: Do ccCallSetupRequest to MSPI Mar 18 10:57:59.139: lapp_on_conference_fmsp_dmfp: Starting conference with FMSP and DMSP Mar 18 10:57:59.139: lapp_on_conference_fmsp_dmfp: 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 fmfp
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 fmfp

```

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 vdltl-5300-7a#
```



接收电子邮件的客户端在打开具有MDN集的电子邮件时会看到与上面类似的窗口。请求者收到的回复是以电子邮件的形式发送给用户，邮件文本如下：“This is a receipt for the email sent to "8913144" <Fax=8913144@testlab-t37.com> at 3/18/2002 10:58AM。此回执验证邮件是否已在收件人的计算机上于上午3/18/2002 11:07显示。”

```
vdltl-5300-7a# debug mta send all
All email send debugging is on
vdltl-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@vdltl-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 vdltl-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@vdltl-5300-7a.testlab-t37.com....Sender OK
Mar 18 14:50:49.666: (C)S: RCPT TO:
```

```
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 dmfp 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 e-mail address命令不会向屏幕本身显示任何内容，但它非常有用。它使用路由器作为SMTP客户端，向debug命令中给定的地址发送电子邮件。该邮件在配置中定义主题，来自“mspi测试用户”。它包含带有“This is a test e-mail message sent via Cisco Powered Libretto Faxmail”（这是通过思科支持的Libretto Faxmail发送的测试电子邮件）的文本附件。

以下是OnRamp传真端的调试：

```
vdtl-5300-7a# debug fmfp 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 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 application
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 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 call14Leg=307, state=1, substate=4
Mar 19 14:46:31.532: fax2_response_receive: PROCESSING
Mar 19 14:46:31.672: t30 call14Leg=307, state=1, substate=4
Mar 19 14:46:31.672: in response receive WAIT FOR CD
Mar 19 14:46:31.672: t30 call14Leg=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 call14Leg=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 call14Leg=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 call14Leg=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 call14Leg=307, state=1, substate=6 Mar 19 14:46:36.472:
fax2_configure_rx_data: DETECTED_DATA
Mar 19 14:46:36.472: t30 call14Leg=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 call14Leg=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 call14Leg=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 call14Leg=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
call14Leg=307, state=1, substate=6 Mar 19 14:46:44.140: fax2_configure_rx_data: DETECTED_COMMAND
Mar 19 14:46:44.140: t30 call14Leg=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 call14Leg=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
call14Leg=307, state=1, substate=7 Mar 19 14:46:45.200: fax2_command_receive: PROCESSING Mar 19
14:46:45.352: t30 call14Leg=307, state=1, substate=7 Mar 19 14:46:45.352: fax2_command_receive:
RECEIVED_COMMAND Mar 19 14:46:45.352: t30 call14Leg=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 call14Leg=307, state=3, substate=10 !--- The substate is changed to
WAIT_FOR_FDR. Mar 19 14:46:45.352: waiting for page acceptance by the application Mar 19
14:46:45.352: t30 call14Leg=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 call14Leg=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 call14Leg=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
 call14Leg=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
 call14Leg=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 call14Leg=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
 call14Leg=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 call14Leg=307, state=1, substate=6 Mar 19
 14:46:56.512: fax2\_configure\_rx\_data: DETECTED\_COMMAND Mar 19 14:46:56.512: t30 call14Leg=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 call14Leg=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 call14Leg=307, state=1, substate=7 Mar 19 14:46:57.552:
 fax2\_command\_receive: PROCESSING Mar 19 14:46:57.700: t30 call14Leg=307, state=1, substate=7 Mar
 19 14:46:57.700: fax2\_command\_receive: RECEIVED\_COMMAND Mar 19 14:46:57.700: t30 call14Leg=307,
 state=3, substate=8 Mar 19 14:46:57.700: received EOP
 !--- Received End of Procedure. Mar 19 14:46:57.700: t30 call14Leg=307, state=3, substate=10 Mar
 19 14:46:57.700: waiting for page acceptance by the application Mar 19 14:46:57.700: t30
 call14Leg=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 application Mar 19 14:47:02.188: %ISDN-6-DISCONNECT: Interface Serial0:18  
disconnected from 8915510 , call lasted 38 seconds vdltl-5300-7a#
```

```
vdltl-5300-7a# debug fax relay t30 called-number 8913144  
Debugging fax relay t30 to 8913144  
vdltl-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

有关详细信息，请参阅《传真中继故障排除指南》。

## 显示命令

```
vdltl-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 dlc1 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
```

## 相关信息

- [T.37离线管道电传](#)
- [FAX over IP T.37存储和发送传真](#)
- [语音技术支持](#)
- [语音和统一通信产品支持](#)
- [Cisco IP 电话故障排除](#)
- [技术支持 - Cisco Systems](#)