T.37 OnRamp Faxing

Contents

Introduction

Esta seção do documento Fax over IP T.37 Store and Forward Fax descreve o armazenamento e o encaminhamento OnRamp de fax. OnRamp T.37 é o processo de aceitar uma chamada de fax, codificar esse fax em um formato Tagged Image File Format (TIFF) e de enviar esse arquivo TIFF para um servidor de e-mail como um anexo.

Este documento contém a configuração necessária para tornar o recurso operacional. A seção Troubleshoot aborda os comandos **debug** úteis e como interpretar seu significado. A topologia usada é mostrada na seção Diagrama de Rede.

Prerequisites

Requirements

Os requisitos específicos para este documento estão especificados na seção principal, Fax sobre IP T.37 Store e Forward Fax.

Componentes Utilizados

Este documento não se restringe a versões de software e hardware específicas.

The information in this document was created from the devices in a specific lab environment. All of

the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Conventions

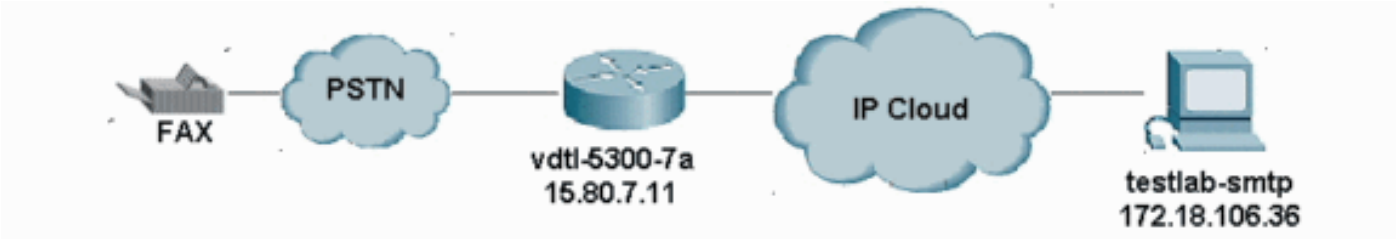
For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Configuração

Nas seções abaixo, primeiro os parâmetros de configuração do Cisco IOS® Software relevantes para a configuração de fax OnRamp são explicados e, em seguida, a configuração 5300 é exibida com mais notas, esclarecendo as funções de comandos importantes. Alguns parâmetros de configuração opcionais podem ser encontrados na seção que segue a configuração 5300.

Diagrama de Rede

Este documento utiliza a instalação de rede mostrada no diagrama abaixo.



Parâmetros de configuração

Parâmetros obrigatórios:	
fax interface-type fax-mail	Ativa a funcionalidade T.37 para o gateway. Requer uma reinicialização no 5300, mas não no 5350 ou 5400.
mta send server	Esse é o nome de host ou o endereço IP do servidor SMTP (Simple Mail Transfer Protocol) pelo qual o roteador enviará o e-mail OnRamp. Sem essa configuração, o roteador não sabe para onde enviar o e-mail OnRamp. Consulte a seção Nenhum servidor configurado para depurações e mensagens de console sem o servidor configurado.
mta send postmaster	Este endereço é usado se as opções **mta sent mail-from** não avaliarem ou não

	estiverem configuradas. Ele é colocado no campo **De** e-mail OnRamp. Isso é opcional se **mta send mail-from username** e **mta send mail-from hostname** estiverem presentes. Clique aqui para **debug mspi** para uma chamada com falha.
ip domain-name	Usado para identificar remetente de e-mail na mensagem HELO com hostname.domain-name. O roteador deve ser recarregado depois que esse comando for configurado.
call application voice onramp flash:app_libretto_onramp.2.0.1.1.tcl	Define um nome global para o aplicativo (onramp, neste caso) e sua localização (na flash do roteador, neste caso).
dial-peer voice 8913180 pots application onramp	Liga para o aplicativo quando esse peer de discagem é correspondido.
dial-peer voice 1 mmoip application fax_on_vfc_onramp_app out-bound	Aplicativo a ser chamado quando esse peer de e-mail sobre IP multimídia (MMoIP) é correspondido. Pré-incluído no software Cisco IOS. Visível através do **resumo de voz do aplicativo de chamada**.
Parâmetros opcionais:	
mta send mail-from hostname	Este é o nome de host a ser usado no campo **De** no e-mail OnRamp. Obrigatório se o comando **mta send postmaster** não estiver presente. Deve ser configurado se **mta send mail-from username** for usado.
mta send mail-from username	Este é o originador a ser usado no campo **De** no e-mail OnRamp. Usado em conjunto com **mta send mail-from hostname** para obter todo o campo From (De), ou seja, username@hostname.

	Obrigatório se o comando **mta send postmaster** não estiver presente. Deve ser configurado se **mta send mail-from hostname** for usado.
mta send subject	Sequência de caracteres de texto a ser usada no campo **Assunto** no e-mail OnRamp.
mta send with-subject	• Anexa o número da parte chamadora com a palavra-chave **s**. • Anexa o número da parte chamada com a palavra-chave **d**. • Anexa o número da parte chamada e da parte chamada com a palavra-chave **ambos**. Para a exibição de depuração, clique aqui.
mta send return-receive-to	As palavras-chave são **nome de usuário** e **nome de host**. Juntos, eles formam a notificação de disposição para:username@hostname.
dial-peer voice *number* **mmoip** mdn	Solicita que um e-mail enviado por meio deste peer MMoIP solicite uma notificação de disposição de mensagem (MDN) seja enviado para o destino definido pelo comando **mta send return-receive-to**.
número de ***voz de peer de discagem mmoip*** *dsn {delay | sucesso | falha}*	Solicita que um aviso de status de entrega (DSN) seja enviado para o destino definido pelo comando **mta send mail-from**

Configuração OnRamp

```
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#
```

Configuração opcional

Aqui estão alguns parâmetros de configuração opcionais. O primeiro exemplo mostra como configurar várias contas de e-mail usando endereços de e-mail tradicionais, e o segundo exemplo mostra como configurar várias contas de e-mail usando números de parte chamada para endereços de e-mail.

Exemplo 1:

! 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	Nesta configuração, o PRI tem dois números de Discagem direta interna (DID): 891-3144 e 891-3145. Dependendo do número discado, um e-mail é enviado para andy@testlab-t37.com ou para bobby@testlab-t37.com.

fax_on_vfc_onramp_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 !	

Exemplo 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 !	Com essa configuração, o Serviço de Identificação de Número Discado (DNIS - Dialed Number Identification Service) (número da parte chamada) é inserido no RCPT TO: Comando SMTP. Isso permite que os clientes forneçam a cada usuário um DID para aplicativos OnRamp. Eles simplesmente adicionam um alias no servidor de e-mail. 12 de março, 15:42:12.947: C)S: RCPT PARA:<FAX=8913144@testlab-t37.com>

Observação: certifique-se de que o alias de e-mail seja FAX=8913144@domain.com em vez de 8913144@domain.com ou o e-mail não será entregue corretamente.

Troubleshoot

Depurações com Falha

Observação: as alterações de configuração são anotadas acima das depurações.

```
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
!
```

Observação: o comando **mta send mail-from username** é omitido da configuração, assim como o comando **mta send postmaster**.

```
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#
```

O mesmo problema pode ser visto um pouco mais claramente com esta depuração:

```
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
```

Nenhum servidor configurado

```
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#
```

Servidor configurado, mas não existe rota IP para o servidor

```
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#
```

Observação: o roteador não está enviando um FQDN (Fully Qualified Domain Name, nome de domínio totalmente qualificado) para o servidor MS Exchange e não gosta da sintaxe. Isso ocorre porque o roteador requer um recarregamento após adicionar "**ip domain-name *domain*** "

```
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#
```

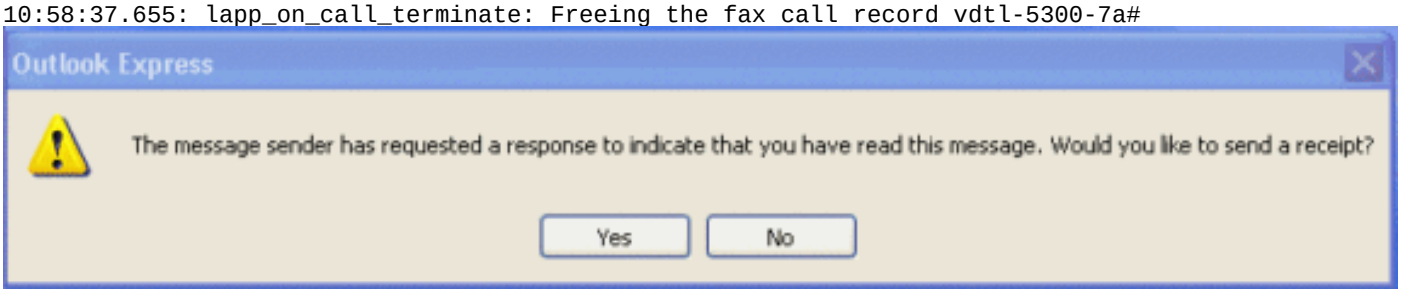
Depurações de trabalho

Esses comandos **debug** são usados para o lado SMTP de OnRamp:

```
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#
```



O cliente que recebe o e-mail vê uma janela semelhante à acima ao abrir um e-mail com um conjunto de MDN. A resposta que o solicitante recebe está na forma de e-mail enviado ao usuário com texto de mensagem que diz: "Este é um recibo do e-mail que você enviou para "8913144" <Fax=8913144@testlab-t37.com> às 10:58 da manhã de 3/18/2002. Este recibo verifica se a mensagem foi exibida no computador do destinatário em 18/03/2002 11:07 AM."

```
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#
```

Observação: o comando **debug mmoip send email *address*** não exibe nada para a própria tela, mas é muito útil. Ele usa o roteador como um cliente SMTP para enviar um e-mail para o endereço fornecido no comando debug. O e-mail tem o assunto definido na configuração e é do "usuário de teste mspi". Ele contém um anexo de texto com a linha, "Esta é uma mensagem de e-mail de teste enviada via Cisco Powered Libretto Faxmail."

Estas são depurações para o lado de fax de OnRamp:

```
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 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
```

Para obter mais informações, consulte o Guia de solução de problemas de fax relay.

comandos show

```
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
```

Informações Relacionadas

- T.37 OffRamp Faxing
- Fax sobre IP T.37 Store and Forward Fax
- Suporte à Tecnologia de Voz
- Suporte aos produtos de Voz e Comunicações Unificadas
- Troubleshooting da Telefonia IP Cisco
- Suporte Técnico - Cisco Systems