T.37-OnRamp-Faxen

Inhalt

Einführung

In diesem Abschnitt des [Fax over IP T.37 Store and Forward Fax-](#)Dokuments wird das OnRamp Store and Forward Fax-Faxen beschrieben. OnRamp T.37 ist der Prozess zum Annehmen eines Faxanrufs, zum Kodieren dieses Fax in ein TIFF (Tagged Image File Format) und zum Senden dieses TIFF als Anhang an einen E-Mail-Server.

Dieses Dokument enthält die Konfiguration, die für die Funktion erforderlich ist. Im Abschnitt [Fehlerbehebung](#) werden die nützlichen **Debugbefehle** und die Interpretation ihrer Bedeutung erläutert. Die verwendete Topologie wird im Abschnitt [Netzwerkdiagramm](#) angezeigt.

Voraussetzungen

Anforderungen

Die spezifischen Anforderungen für dieses Dokument sind im Hauptabschnitt "[Fax over IP T.37 Store and Forward Fax"](#) festgelegt.

Verwendete Komponenten

Dieses Dokument ist nicht auf bestimmte Software- und Hardwareversionen beschränkt.

Die Informationen in diesem Dokument wurden von den Geräten in einer bestimmten

Laborumgebung erstellt. Alle in diesem Dokument verwendeten Geräte haben mit einer leeren (Standard-)Konfiguration begonnen. Wenn Ihr Netzwerk in Betrieb ist, stellen Sie sicher, dass Sie die potenziellen Auswirkungen eines Befehls verstehen.
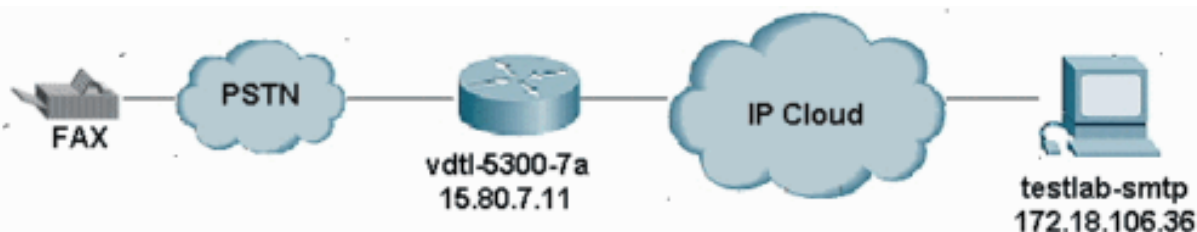
Konventionen

Weitere Informationen zu Dokumentkonventionen finden Sie in den Cisco Technical Tips Conventions.

Konfiguration

In den folgenden Abschnitten werden zunächst die für die OnRamp-Faxkonfiguration relevanten Cisco IOS® Software-Konfigurationsparameter erläutert. Anschließend wird die Konfiguration der Serie 5300 mit weiteren Hinweisen zur Erläuterung der Funktionen wichtiger Befehle angezeigt. Einige optionale Konfigurationsparameter sind im Abschnitt zu finden, der der 5300-Konfiguration folgt.

Netzwerkdiagramm

In diesem Dokument wird die im Diagramm unten dargestellte Netzwerkeinrichtung verwendet.

Konfigurationsparameter

Obligatorische Parameter:	
Fax-Schnittstellenart Fax-Mail	Aktiviert die T.37-Funktionalität für das Gateway. Erfordert einen Neustart beim 5300, jedoch nicht beim 5350 oder 5400.
MTA-Sendeserver	Dies ist der Hostname oder die IP-Adresse des SMTP-Servers (Simple Mail Transfer Protocol), über den der Router die OnRamp-E-Mail sendet. Ohne diese Konfiguration weiß der Router nicht, wohin er OnRamp-E-Mails senden soll. Informationen zu Debug- und Konsolenmeldungen ohne konfigurierten Server finden Sie im Abschnitt Kein

	[Server konfiguriert](#).
[Postmaster mta senden](#)	Diese Adresse wird verwendet, wenn **die** Optionen **für** per **Mail gesendete Nachrichten** nicht evaluiert werden oder nicht konfiguriert sind. Sie wird im Feld "OnRamp E-Mail **From**" gespeichert. Dies ist optional, wenn **E-Mail-Nachrichten vom Benutzernamen** und **E-Mail-Nachrichten vom Hostnamen** vorhanden sind. Klicken Sie [hier](#), um **mspi** für einen fehlgeschlagenen Aufruf zu debuggen.
[ip domain-name](#)	Wird verwendet, um E-Mail-Absender in der HELO-Nachricht mit hostname.domain-name zu identifizieren. Der Router muss nach der Konfiguration dieses Befehls neu geladen werden.
[Sprachanruf-Onramp flash:app_libretto_onramp.2.0.1.1.tcl](#)	Definiert einen globalen Namen für die Anwendung (in diesem Fall onramp) und deren Speicherort (in diesem Fall im Flash-Speicher des Routers).
[DFÜ-Peer-Sprach-Anwendung 8913180 POTS im Ramp](#)	Ruft Anwendungs-Onramp auf, wenn dieser Dial-Peer zugeordnet wird.
[Dial-Peer-Voice-Anwendung, 1 mmoip, Fax_on_vfc_onramp_app, ausgehend](#)	Anwendung, die aufgerufen wird, wenn dieser Multimedia Mail over IP (MMoIP)-Peer zugeordnet wird. In Cisco IOS Software vorgebündelt. Durch **Anzeige der Sprachzusammenfassung der Anrufanwendung** sichtbar.
Optionale Parameter:	
[mta send mail from hostname](#)	Dies ist der Hostname, der im Feld **Von** der OnRamp-E-Mail verwendet wird. Obligatorisch, wenn der

	Befehl **mta send postmaster** nicht vorhanden ist. Muss konfiguriert werden, wenn **mta send mail-from-username** verwendet wird.
[mta Mail vom Benutzernamen senden](#)	Dies ist der Urheber, der im Feld **Von** der OnRamp-E-Mail verwendet wird. Wird zusammen mit dem **Hostnamen für das Senden von E-Mail-Nachrichten** verwendet, um das gesamte Feld "Von" abzurufen, d. h. username@hostname. Obligatorisch, wenn der Befehl **mta send postmaster** nicht vorhanden ist. Muss konfiguriert werden, wenn der **mta send mail-from-Hostname** verwendet wird.
[Betreff für MTA](#)	Textzeichenfolge, die im Feld **Betreff** der OnRamp-E-Mail verwendet wird.
MTA mit Betreff senden	- Hängt die Nummer des Anrufers mit dem Stichwort **s** an. - Hängt die Nummer des Angerufenen mit dem Schlüsselwort **d** an. - Hängt die Anrufer- und die Angerufene-Nummer mit dem Schlüsselwort **beide** an. Klicken Sie [hier](#), um das Debugging anzuzeigen.
[mta send return document-to](#)	Schlüsselwörter sind **Benutzername** und **Hostname**. Zusammen bilden sie die Disposition-notification-to:username@hostname.
Dial-Peer-*Sprachnummer mmoip* [mdn](#)	Anfragen, dass eine E-Mail, die über diesen mIP-Peer gesendet wird, eine MDN-Benachrichtigung (Message Disposition Notification) an das Ziel sendet, das durch den Befehl **mta send return-Receive-to**-Befehl definiert

	ist.
mmoip dsn {Delay, Dial-Peer-*Sprachnummer*)	Erfolg	Ausfall}	fordert, dass eine Zustellungsstatusmeldung (DSN) an das Ziel gesendet wird, das durch den Befehl **mta send mail-from** definiert ist

OnRamp-Konfiguration

```
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#
```

Optionale Konfiguration

Nachfolgend sind einige optionale Konfigurationsparameter aufgeführt. Im ersten Beispiel wird veranschaulicht, wie mehrere E-Mail-Konten mithilfe herkömmlicher E-Mail-Adressen konfiguriert werden. Im zweiten Beispiel wird gezeigt, wie mehrere E-Mail-Konten mithilfe von Angerufenen-

Nummern für E-Mail-Adressen konfiguriert werden.

Beispiel 1:

<pre>!
dial-peer voice
1 mmoip
 application
fax_on_vfc_onram
p_app out-bound
 destination-
pattern 8913144
 information-
type fax
 session target
mailto:andy@test
lab-t37.com
!
dial-peer voice
2 mmoip
 application
fax_on_vfc_onram
p_app out-bound
 destination-
pattern 8913145
 information-
type fax
 session target
mailto:bobby@tes
tlab-t37.com
!
dial-peer voice
891314 pots
 application
onramp
 incoming
called-number
891314[4-5]
 direct-inward-
dial
 port 0:D
!</pre>
	In dieser Konfiguration verfügt das PRI über zwei DID-Nummern (Direct Inward Dialing): 891-3144 und 891-3145. Je nach gewählter Nummer wird eine E-Mail entweder an andy@testlab-t37.com oder an bobby@testlab-t37.com gesendet.

Beispiel 2:

<pre>!
dial-peer voice
1 mmoip
application
fax_on_vfc_onra
mp_app out-
bound
destination-
pattern 8913144
information-
type fax
session target
mailto:d@test
lab-t37.com
!</pre>
	Bei dieser Konfiguration wird der Dienst zur Rufnummernerkennung (Dialed Number Identification Service, DNIS) (angerufene Nummer) in den RCPT TO eingefügt: SMTP-Befehl. So können Kunden jedem Benutzer eine DID für OnRamp-Anwendungen zuweisen. Sie fügen einfach einen Alias auf dem E-Mail-Server hinzu. 12.03.15:42:12.947: C) S: RCPT TO:<FAX=8913144@testlab-t37.com>

Hinweis: Stellen Sie sicher, dass die E-Mail-Alias FAX=8913144@domain.com und nicht

8913144@domain.com lautet, oder dass die E-Mail nicht korrekt zugestellt wird.

Fehlerbehebung

Fehlgeschlagene Debugger

Hinweis: Konfigurationsänderungen werden oberhalb des Debuggens vermerkt.

```
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
!
```

Hinweis: Der Befehl **mta send mail-from username** wird ebenso wie der Befehl mta send postmaster ausgelassen.

```
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#
```
Das gleiche Problem ist bei diesem Debuggen etwas klarer erkennbar:

```
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

Kein Server konfiguriert

```
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#
```

Server konfiguriert, aber keine IP-Route zum Server vorhanden

```
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#
```

Hinweis: Der Router sendet keinen vollqualifizierten Domänennamen (Fully Qualified Domain Name, FQDN) an den MS Exchange-Server und ihm gefällt die Syntax nicht. Dies liegt daran, dass der Router nach dem Hinzufügen der *Domäne* "**ip domain-name *domain***" neu geladen werden muss.

```
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#
```

Arbeitsdebuggen

Diese **Debug**-Befehle werden für die SMTP-Seite von OnRamp verwendet:

```
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#
```
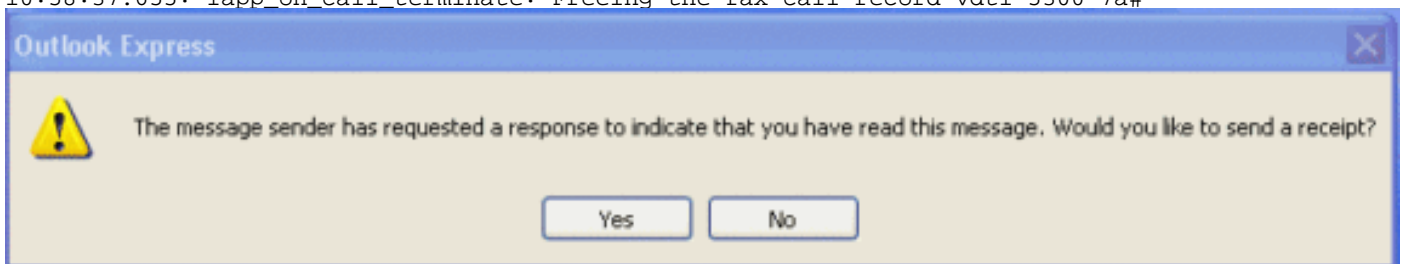

Der Client, der die E-Mail empfängt, sieht ein Fenster ähnlich dem oben beim Öffnen einer E-Mail mit einem MDN-Set. Die Antwort, die der Anforderer erhält, besteht in einer E-Mail, die an den Benutzer gesendet wird. Die Nachricht lautet: "Dies ist eine Empfangsbestätigung für die E-Mail,

die Sie an "8913144" <Fax=8913144@testlab-t37.com> um 18.03.2002, 10:58 Uhr gesendet haben. Mit dieser Quittung wird bestätigt, dass die Nachricht am 18.03.2002 um 11:07 Uhr auf dem Computer des Empfängers angezeigt wurde."

```
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#
```

Hinweis: Der Befehl debug mmoip send email *address* zeigt nichts am Bildschirm an, aber er ist sehr nützlich. Er verwendet den Router als SMTP-Client, um eine E-Mail an die im Befehl debug angegebene Adresse zu senden. Der Betreff der E-Mail ist in der Konfiguration definiert und stammt von "mspi Test User". Sie enthält einen Textanhang mit dem Text "Dies ist eine Test-E-Mail, die über Cisco Powered Libretto Faxmail gesendet wird."

Dies sind Debugging für die Faxseite von 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 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
```

Weitere Informationen finden Sie im [Leitfaden zur Fehlerbehebung bei Fax-Relay](#).

[Befehle anzeigen](#)

```
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
```

Zugehörige Informationen

- T.37 OffRamp-Faxen
- Fax over IP T.37 Store und Forward Fax
- Unterstützung von Sprachtechnologie
- Produkt-Support für Sprach- und Unified Communications
- Fehlerbehebung bei Cisco IP-Telefonie
- Technischer Support - Cisco Systems