
Debug Commands

This section documents new **debug** commands. All other **debug** commands used with this feature are documented in the Cisco IOS Release 12.0 *Debug Command Reference*.

- **debug fax receive all**
- **debug fax receive called-number**
- **debug fax receive calling-number**
- **debug fax receive specific**
- **debug fax send all**
- **debug fax send calling-number**
- **debug fax send specific**
- **debug fmail client**
- **debug fmail server**
- **debug mmoip aaa**
- **debug mmoip send e-mail**
- **debug mmoip send fax**
- **debug mmoip transfer**
- **debug mta receive all**
- **debug mta send all**
- **debug mta send rcpt-to**
- **debug text-to-fax**
- **debug TIFF reader**
- **debug TIFF writer**

debug fax receive all

Use the **debug fax receive all** EXEC command to display Class 2 fax tracing information on all on-ramp fax connections. Use the **no** form of this command to disable debugging output.

[no] debug fax receive all

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following example displays output from the **debug fax receive all** command. This command, by definition, displays Class 2 information about all on-ramp fax calls as they occur; in this example, only one fax call is being traced.

```
router# debug fax receive all
All fax receptions debugging is on
router#
```

The following output shows that a fax call has come in to the on-ramp gateway, and the on-ramp gateway is verifying calling number (the transmitter), the called number (the receiver) and identifying the appropriate on-ramp dial peer.

```
*Jan 2 194033.945 csm_check_accept_fax_call calling=4085553414 called=5550847, peer
found
*Jan 2 194033.945 ftsp_onramp_new_call new call, calling=4085553414, called=5550847
```

A fax record is created for TTY line 19.

```
*Jan 2 194033.949 create_fax_record tty19
*Jan 2 194033.949 ftsp_ind_call tty19, peer_tag=400, callid=0x48
```

Class 2 modem tracing begins, showing that the modem is being initialized.

```
*Jan 2 194033.949 000000.000 AA
*Jan 2 194034.001 000000.052 TT
*Jan 2 194034.057 000000.108 QOE0S0=0
OK
```

Class 2 modem tracing continues.

```
*Jan 2 194034.057 000000.108 OK
*Jan 2 194037.325 000003.376
RING
000003.376 AT-C0T105

*Jan 2 194037.333 000003.384
OK
```

```
*Jan 2 194037.333 000003.384 ATT106
*Jan 2 194037.337 000003.388
OK
lTE AT+FCLASS=2
*Jan 2 194037.345 000003.396
OK
000003.396 +FDCC=.;+FBOR=

*Jan 2 194037.357 000003.412
OK
000003.412 AT+FLID

*Jan 2 194037.365 000003.416
OK
ATX3DT;

*Jan 2 194040.281 000006.332
OK
```

In the following output, the on-ramp gateway is about to present a dial tone to the user.

```
about to play dial-tone
```

In the following output, the on-ramp gateway receives digits form the caller.

```
*Jan 2 194043.105 000009.156 0 Digit 0
*Jan 2 194043.241 000009.292 1 Digit 1
*Jan 2 194043.389 000009.440 2 Digit 2
*Jan 2 194043.541 000009.592 3 Digit 3
*Jan 2 194043.693 000009.744 4 Digit 4
*Jan 2 194043.841 000009.892 5 Digit 5
*Jan 2 194044.005 000010.056 6 Digit 6
*Jan 2 194044.153 000010.204 7 Digit 7
*Jan 2 194044.305 000010.356 8 Digit 8
*Jan 2 194044.441 000010.492 9 Digit 9
*Jan 2 194044.605 000010.656 0 Digit 0
*Jan 2 194044.741 000010.792 1 Digit 1
*Jan 2 194044.905 000010.956 2 Digit 2
*Jan 2 194045.041 000011.092 3 Digit 3
*Jan 2 194045.193 000011.244 4 Digit 4
*Jan 2 194045.341 000011.392 5 Digit 5
*Jan 2 194045.493 000011.544 6 Digit 6
*Jan 2 194045.641 000011.692 7 Digit 7
*Jan 2 194045.793 000011.844 8 Digit 8
*Jan 2 194045.941 000011.992 9 Digit 9
```

```
*Jan 2 194046.093 000012.144 # Digit #
*Jan 2 194046.241 000012.292 1 Digit 1
*Jan 2 194046.393 000012.444 4 Digit 4
*Jan 2 194046.541 000012.592 0 Digit 0
*Jan 2 194046.693 000012.744 8 Digit 8
*Jan 2 194046.841 000012.892 5 Digit 5
*Jan 2 194046.993 000013.044 7 Digit 7
*Jan 2 194047.141 000013.192 1 Digit 1
*Jan 2 194047.305 000013.356 0 Digit 0
*Jan 2 194047.441 000013.492 8 Digit 8
*Jan 2 194047.605 000013.656 4 Digit 4
*Jan 2 194047.741 000013.792 7 Digit 7
*Jan 2 194058.393 000024.444
+FCON
```

The following output shows that the fax call is connected from the on-ramp router to the calling party. Class 2 modem tracing continues.

```
+FTSI          +31 703712194"
ld19h %FTSP-6-FAX_CONNECT Reception
*Jan 2 194058.393 RxPhaseA CONNECT
*Jan 2 194058.393 CollectDTMF tty=19, ftsp set time=15723604,con time=15726049,tx
dur=24450 Redialer Serial Number 01234567890123456789
*Jan 2 194058.393 ftsp_onramp_match_digits tty19, redialer in use
*Jan 2 194058.393 ftsp_onramp_match_digits destPat(5710847), matched(7), tag(401)
target (mailtotest@nt4server.allegro.com) RxPhaseB RxTSI
*Jan 2 194058.665 000024.716
+FDCS0,3,0,2,0,0,0,5
RxPhaseB RxDCS
*Jan 2 194100.641 000026.692
OK
RxPhaseB OK PhB
000026.692 AT+FDR
*Jan 2 194101.949 000028.000
+FCFR
+FDCS0,3,0,2,0,0,0,5
RxPhaseB Rx CFR
RxPhaseB RxDCS
*Jan 2 194102.573 000028.624
CONNECT
RxPhaseB RxCon
RxPhaseC
000028.624DC2
```

```
*Jan 2 194130.761 000056.812
+FPST1,0

+FET2

OK
RxPhaseD RxFPTS
RxPhaseD MCF
RxPhaseD MODEM_FET

*Jan 2 194130.761 RxPhaseD tty=19,ensp set time=15726049,con time=15729286 RxPhaseD Rx
EOP
RxPhaseD MODEM_OK
000056.812 AT+FDR
```

The following output shows that the fax transmission is complete.

```
*Jan 2 194133.469 000059.520
+FHNG00
RxPhaseE Received Hangup Call complete

*Jan 2 194133.533 000059.584
OK
RxPhaseE Received OK Ending Call
```

The following output shows that the calling party disconnects following fax transmission.

```
1d19h %FTSP-6-FAX_DISCONNECT Reception
*Jan 2 194133.533 fap_onramp_end_call disconnect-
1d19h %LINK-3-UPDOWN Interface Serial10, changed state to down
*Jan 2 194134.537 all booleans set
*Jan 2 194134.537 ftsp_do_call_history disc cause=16, Normal connection delete_f_rec()
calling free()
```

Related Commands

Command	Description
debug fax receive called-number	Displays Class 2 fax tracing information about on-ramp connections filtered on a specific called number.
debug fax receive calling-number	Displays Class 2 fax tracing information about on-ramp connections filtered on a specific calling number.
debug fax receive specific	Enables debug fax receive all command Class 2 fax tracing information to be filtered using the calling number or called number.

debug fax receive called-number

Use the **debug fax receive called-number** EXEC command to display Class 2 fax tracing information about on-ramp connections filtered on a particular called number. Use the **no** form of this command to disable debugging output.

[no] debug fax receive called-number {*string*}

Syntax Description

string Specifies the called telephone number. Valid entries are any series of digits that specify the E.164 telephone number.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

Note The **debug fax receive called-number** command works with the **debug fax receive specific** command. The **debug fax receive specific** command enables Store and Forward Fax to filter the **debug fax receive all** command information using only the called number. You must enter both commands to filter debug information for a specific called number.

The following example displays output from the **debug fax receive called-number** command. In this example, Store and Forward Fax displays Class 2 information about all on-ramp fax calls for the called number 555-0847.

```
router# debug fax receive specific
router# debug fax receive called-number 5550847
All fax receptions debugging is on
router#
```

The following output shows that a fax call has come in to the on-ramp gateway, and the on-ramp gateway is verifying the calling number (the transmitter), the called number (the receiver), and identifying the appropriate on-ramp dial peer.

```
*Jan 2 194033.945 csm_check_accept_fax_call calling=4085553414 called=5550847, peer
found
*Jan 2 194033.945 ftsp_onramp_new_call new call, calling=4085553414, called=5550847
```

A fax record is created for TTY line 19.

```
*Jan 2 194033.949 create_fax_record tty19
*Jan 2 194033.949 ftsp_ind_call tty19, peer_tag=400, callid=0x48
```

Class 2 modem tracing begins, showing that the modem is being initialized.

```
*Jan 2 194033.949 000000.000 AA
*Jan 2 194034.001 000000.052 TT
*Jan 2 194034.057 000000.108 QOE0S0=0
OK
```

Class 2 modem tracing continues.

```
*Jan 2 194034.057 000000.108 OK
*Jan 2 194037.325 000003.376
RING
000003.376 AT-C0T105

*Jan 2 194037.333 000003.384
OK

*Jan 2 194037.333 000003.384 ATT106
*Jan 2 194037.337 000003.388
OK
lTE AT+FCLASS=2
*Jan 2 194037.345 000003.396
OK
000003.396 +FDCC=.;+FBOR=

*Jan 2 194037.357 000003.412
OK
000003.412 AT+FLID

*Jan 2 194037.365 000003.416
OK
ATX3DT;

*Jan 2 194040.281 000006.332
OK
```

In the following output, the on-ramp gateway is about to present a dial tone to the user.

```
about to play dial-tone
```

In the following output, the on-ramp gateway receives digits form the caller.

```
*Jan 2 194043.105 000009.156 0 Digit 0
*Jan 2 194043.241 000009.292 1 Digit 1
*Jan 2 194043.389 000009.440 2 Digit 2
*Jan 2 194043.541 000009.592 3 Digit 3
*Jan 2 194043.693 000009.744 4 Digit 4
*Jan 2 194043.841 000009.892 5 Digit 5
*Jan 2 194044.005 000010.056 6 Digit 6
*Jan 2 194044.153 000010.204 7 Digit 7
*Jan 2 194044.305 000010.356 8 Digit 8
*Jan 2 194044.441 000010.492 9 Digit 9
*Jan 2 194044.605 000010.656 0 Digit 0
*Jan 2 194044.741 000010.792 1 Digit 1
*Jan 2 194044.905 000010.956 2 Digit 2
```

debug fax receive called-number

```
*Jan 2 194045.041 000011.092 3 Digit 3
*Jan 2 194045.193 000011.244 4 Digit 4
*Jan 2 194045.341 000011.392 5 Digit 5
*Jan 2 194045.493 000011.544 6 Digit 6
*Jan 2 194045.641 000011.692 7 Digit 7
*Jan 2 194045.793 000011.844 8 Digit 8
*Jan 2 194045.941 000011.992 9 Digit 9
*Jan 2 194046.093 000012.144 # Digit #
*Jan 2 194046.241 000012.292 1 Digit 1
*Jan 2 194046.393 000012.444 4 Digit 4
*Jan 2 194046.541 000012.592 0 Digit 0
*Jan 2 194046.693 000012.744 8 Digit 8
*Jan 2 194046.841 000012.892 5 Digit 5
*Jan 2 194046.993 000013.044 7 Digit 7
*Jan 2 194047.141 000013.192 1 Digit 1
*Jan 2 194047.305 000013.356 0 Digit 0
*Jan 2 194047.441 000013.492 8 Digit 8
*Jan 2 194047.605 000013.656 4 Digit 4
*Jan 2 194047.741 000013.792 7 Digit 7
*Jan 2 194058.393 000024.444
+FCON
```

The following output shows that the fax call is connected from the on-ramp router to the calling party. Class 2 modem tracing continues.

```
+FTSI          +31 703712194"
1d19h %FTSP-6-FAX_CONNECT Reception
*Jan 2 194058.393 RxPhaseA CONNECT
*Jan 2 194058.393 CollectDTMF tty=19, ftsp set time=15723604,con time=15726049,tx
dur=24450 Redialer Serial Number 01234567890123456789

*Jan 2 194058.393 ftsp_onramp_match_digits tty19, redialer in use

*Jan 2 194058.393 ftsp_onramp_match_digits destPat(5710847), matched(7), tag(401)
target (mailtotest@nt4server.allegro.com) RxPhaseB RxTSI

*Jan 2 194058.665 000024.716
+FDCS0,3,0,2,0,0,0,5
RxPhaseB RxDCS

*Jan 2 194100.641 000026.692
OK
RxPhaseB OK PhB
000026.692 AT+FDR
```

```

*Jan  2 194101.949 000028.000
+FCFR

+FDCS0,3,0,2,0,0,0,5
RxPhaseB Rx CFR
RxPhaseB RxDCS

*Jan  2 194102.573 000028.624
CONNECT
RxPhaseB RxCon
RxPhaseC
000028.624DC2

*Jan  2 194130.761 000056.812
+FPPTS1,0

+FET2

OK
RxPhaseD RxFPPTS
RxPhaseD MCF
RxPhaseD MODEM_FET

*Jan  2 194130.761 RxPhaseD tty=19,ensp set time=15726049,con time=15729286 RxPhaseD Rx
EOP
RxPhaseD MODEM_OK
000056.812 AT+FDR

```

The following output shows that the fax transmission is complete.

```

*Jan  2 194133.469 000059.520
+FHNG00
RxPhaseE Received Hangup Call complete

*Jan  2 194133.533 000059.584
OK
RxPhaseE Received OK Ending Call

```

The following output shows that the calling party disconnects following fax transmission.

```

1d19h %FTSP-6-FAX_DISCONNECT Reception
*Jan  2 194133.533 fap_onramp_end_call disconnect-
1d19h %LINK-3-UPDOWN Interface Serial10, changed state to down
*Jan  2 194134.537 all booleans set
*Jan  2 194134.537 ftsp_do_call_history disc cause=16, Normal connection delete_f_rec()
calling free()

```

Related Commands

Command	Description
debug fax receive all	Displays Class 2 fax tracing information about all on-ramp connections.
debug fax receive calling-number	Displays Class 2 fax tracing information about on-ramp connections filtered on a specific calling number.
debug fax receive specific	Enables debug fax receive all command Class 2 fax tracing information to be filtered using the calling number or called number.

debug fax receive calling-number

Use the **debug fax receive calling-number** EXEC command to display Class 2 fax tracing information about on-ramp connections filtering on a particular calling number. Use the **no** form of this command to disable debugging output.

[no] debug fax receive calling-number {*string*}

Syntax Description

string Specifies the calling telephone number. Valid entries are any series of digits that specify the E.164 telephone number.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

Note The **debug fax receive calling-number** command works with the **debug fax receive specific** command. The **debug fax receive specific** command enables Store and Forward Fax to filter the **debug fax receive all** command information using only the calling number. You must enter both commands to filter debug information for a specific calling number.

The following example displays output from the **debug fax receive calling-number** command. In this example, Store and Forward Fax displays Class 2 information about all on-ramp fax calls for the calling number 408 555-3414.

```
router# debug fax receive specific
router# debug fax receive calling-number 4085553414
All fax receptions debugging is on
router#
```

The following output shows that a fax call has come in to the on-ramp gateway, and the on-ramp gateway is verifying the calling number (the transmitter), the called number (the receiver) and identifying the appropriate on-ramp dial peer.

```
*Jan 2 194033.945 csm_check_accept_fax_call calling=4085553414 called=5550847, peer
found
*Jan 2 194033.945 ftsp_onramp_new_call new call, calling=4085553414, called=5550847
```

A fax record is created for TTY line 19.

```
*Jan 2 194033.949 create_fax_record tty19
*Jan 2 194033.949 ftsp_ind_call tty19, peer_tag=400, callid=0x48
```

Class 2 modem tracing begins, showing that the modem is being initialized.

```
*Jan 2 194033.949 000000.000 AA
*Jan 2 194034.001 000000.052 TT
*Jan 2 194034.057 000000.108 QOE0S0=0
OK
```

Class 2 modem tracing continues.

```
*Jan 2 194034.057 000000.108 OK
*Jan 2 194037.325 000003.376
RING
000003.376 AT-C0T105

*Jan 2 194037.333 000003.384
OK

*Jan 2 194037.333 000003.384 ATT106
*Jan 2 194037.337 000003.388
OK
lTE AT+FCLASS=2
*Jan 2 194037.345 000003.396
OK
000003.396 +FDCC=.;+FBOR=

*Jan 2 194037.357 000003.412
OK
000003.412 AT+FLID

*Jan 2 194037.365 000003.416
OK
ATX3DT;

*Jan 2 194040.281 000006.332
OK
```

In the following output, the on-ramp gateway is about to present a dial tone to the user.

```
about to play dial-tone
```

In the following output, the on-ramp gateway receives digits form the caller.

```
*Jan 2 194043.105 000009.156 0 Digit 0
*Jan 2 194043.241 000009.292 1 Digit 1
*Jan 2 194043.389 000009.440 2 Digit 2
*Jan 2 194043.541 000009.592 3 Digit 3
*Jan 2 194043.693 000009.744 4 Digit 4
*Jan 2 194043.841 000009.892 5 Digit 5
*Jan 2 194044.005 000010.056 6 Digit 6
*Jan 2 194044.153 000010.204 7 Digit 7
*Jan 2 194044.305 000010.356 8 Digit 8
*Jan 2 194044.441 000010.492 9 Digit 9
*Jan 2 194044.605 000010.656 0 Digit 0
*Jan 2 194044.741 000010.792 1 Digit 1
*Jan 2 194044.905 000010.956 2 Digit 2
```

```
*Jan 2 194045.041 000011.092 3 Digit 3
*Jan 2 194045.193 000011.244 4 Digit 4
*Jan 2 194045.341 000011.392 5 Digit 5
*Jan 2 194045.493 000011.544 6 Digit 6
*Jan 2 194045.641 000011.692 7 Digit 7
*Jan 2 194045.793 000011.844 8 Digit 8
*Jan 2 194045.941 000011.992 9 Digit 9
*Jan 2 194046.093 000012.144 # Digit #
*Jan 2 194046.241 000012.292 1 Digit 1
*Jan 2 194046.393 000012.444 4 Digit 4
*Jan 2 194046.541 000012.592 0 Digit 0
*Jan 2 194046.693 000012.744 8 Digit 8
*Jan 2 194046.841 000012.892 5 Digit 5
*Jan 2 194046.993 000013.044 7 Digit 7
*Jan 2 194047.141 000013.192 1 Digit 1
*Jan 2 194047.305 000013.356 0 Digit 0
*Jan 2 194047.441 000013.492 8 Digit 8
*Jan 2 194047.605 000013.656 4 Digit 4
*Jan 2 194047.741 000013.792 7 Digit 7
*Jan 2 194058.393 000024.444
+FCON
```

The following output shows that the fax call is connected from the on-ramp router to the calling party. Class 2 modem tracing continues.

```
+FTSI          +31 703712194"
1d19h %FTSP-6-FAX_CONNECT Reception
*Jan 2 194058.393 RxPhaseA CONNECT
*Jan 2 194058.393 CollectDTMF tty=19, ftsp set time=15723604,con time=15726049,tx
dur=24450 Redialer Serial Number 01234567890123456789

*Jan 2 194058.393 ftsp_onramp_match_digits tty19, redialer in use

*Jan 2 194058.393 ftsp_onramp_match_digits destPat(5710847), matched(7), tag(401)
target (mailtotest@nt4server.allegro.com) RxPhaseB RxTSI

*Jan 2 194058.665 000024.716
+FDCS0,3,0,2,0,0,0,5
RxPhaseB RxDCS

*Jan 2 194100.641 000026.692
OK
RxPhaseB OK PhB
000026.692 AT+FDR
```

```
*Jan 2 194101.949 000028.000
+FCFR

+FDCS0,3,0,2,0,0,0,5
RxPhaseB Rx CFR
RxPhaseB RxDCS

*Jan 2 194102.573 000028.624
CONNECT
RxPhaseB RxCon
RxPhaseC
000028.624DC2

*Jan 2 194130.761 000056.812
+FPTS1,0

+FET2

OK
RxPhaseD RxFPTS
RxPhaseD MCF
RxPhaseD MODEM_FET

*Jan 2 194130.761 RxPhaseD tty=19,ensp set time=15726049,con time=15729286 RxPhaseD Rx
EOP
RxPhaseD MODEM_OK
000056.812 AT+FDR
```

The following output shows that the fax transmission is complete.

```
*Jan 2 194133.469 000059.520
+FHNG00
RxPhaseE Received Hangup Call complete

*Jan 2 194133.533 000059.584
OK
RxPhaseE Received OK Ending Call
```

The following output shows that the calling party disconnects following fax transmission.

```
1d19h %FTSP-6-FAX_DISCONNECT Reception
*Jan 2 194133.533 fap_onramp_end_call disconnect-
1d19h %LINK-3-UPDOWN Interface Serial10, changed state to down
*Jan 2 194134.537 all booleans set
*Jan 2 194134.537 ftsp_do_call_history disc cause=16, Normal connection delete_f_rec()
calling free()
```

Related Commands

Command	Description
debug fax receive all	Displays Class 2 fax tracing information about all on-ramp connections.
debug fax receive called-number	Displays Class 2 fax tracing information about on-ramp connections filtered on a specific called number.
debug fax receive specific	Enables debug fax receive all command Class 2 fax tracing information to be filtered using the calling number or called number.

debug fax receive specific

Use the **debug fax receive specific** EXEC command to enable Class 2 fax protocol tracing information for on-ramp activities to be filtered using either a calling or called number. Use the **no** form of this command to disable filtering debugging output.

[no] debug fax receive specific

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

Note The **debug fax receive specific** command is used in conjunction with both the **debug fax receive called-number** and the **debug fax receive calling-number** commands; essentially the **debug fax receive specific** command enables Store and Forward Fax to filter the **debug fax receive all** command information using either the calling number or the called number, depending on which command you have enabled.

The following example displays output from the **debug fax receive calling-number** command, which is enabled using the **debug fax receive specific** command. In this example, Store and Forward Fax displays Class 2 information about all on-ramp fax calls for the calling number 408 555-3414.

```
router# debug fax receive specific
router# debug fax receive calling-number 4085553414
All fax receptions debugging is on
router#
```

The following output shows that a fax call has come in to the on-ramp gateway, and the on-ramp gateway is verifying the calling number (the transmitter), the called number (the receiver) and identifying the appropriate on-ramp dial peer.

```
*Jan  2 194033.945 csm_check_accept_fax_call calling=4085553414 called=5550847, peer
found
*Jan  2 194033.945 ftsp_onramp_new_call new call, calling=4085553414, called=5550847
```

A fax record is created for TTY line 19.

```
*Jan  2 194033.949 create_fax_record tty19
*Jan  2 194033.949 ftsp_ind_call tty19, peer_tag=400, callid=0x48
```

Class 2 modem tracing begins, showing that the modem is being initialized.

```
*Jan  2 194033.949 000000.000 AA
```

```
*Jan 2 194034.001 000000.052 TT
*Jan 2 194034.057 000000.108 QOE0S0=0
OK
```

Class 2 modem tracing continues.

```
*Jan 2 194034.057 000000.108 OK
*Jan 2 194037.325 000003.376
RING
000003.376 AT-COT105

*Jan 2 194037.333 000003.384
OK

*Jan 2 194037.333 000003.384 ATT106
*Jan 2 194037.337 000003.388
OK
lTE AT+FCLASS=2
*Jan 2 194037.345 000003.396
OK
000003.396 +FDCC=.;+FBOR=

*Jan 2 194037.357 000003.412
OK
000003.412 AT+FLID

*Jan 2 194037.365 000003.416
OK
ATX3DT;

*Jan 2 194040.281 000006.332
OK
```

In the following output, the on-ramp gateway is about to present a dial tone to the user.

```
about to play dial-tone
```

In the following output, the on-ramp gateway receives digits from the caller.

```
*Jan 2 194043.105 000009.156 0 Digit 0
*Jan 2 194043.241 000009.292 1 Digit 1
*Jan 2 194043.389 000009.440 2 Digit 2
*Jan 2 194043.541 000009.592 3 Digit 3
*Jan 2 194043.693 000009.744 4 Digit 4
*Jan 2 194043.841 000009.892 5 Digit 5
*Jan 2 194044.005 000010.056 6 Digit 6
*Jan 2 194044.153 000010.204 7 Digit 7
*Jan 2 194044.305 000010.356 8 Digit 8
*Jan 2 194044.441 000010.492 9 Digit 9
*Jan 2 194044.605 000010.656 0 Digit 0
*Jan 2 194044.741 000010.792 1 Digit 1
*Jan 2 194044.905 000010.956 2 Digit 2
```

debug fax receive specific

```
*Jan 2 194045.041 000011.092 3 Digit 3
*Jan 2 194045.193 000011.244 4 Digit 4
*Jan 2 194045.341 000011.392 5 Digit 5
*Jan 2 194045.493 000011.544 6 Digit 6
*Jan 2 194045.641 000011.692 7 Digit 7
*Jan 2 194045.793 000011.844 8 Digit 8
*Jan 2 194045.941 000011.992 9 Digit 9
*Jan 2 194046.093 000012.144 # Digit #
*Jan 2 194046.241 000012.292 1 Digit 1
*Jan 2 194046.393 000012.444 4 Digit 4
*Jan 2 194046.541 000012.592 0 Digit 0
*Jan 2 194046.693 000012.744 8 Digit 8
*Jan 2 194046.841 000012.892 5 Digit 5
*Jan 2 194046.993 000013.044 7 Digit 7
*Jan 2 194047.141 000013.192 1 Digit 1
*Jan 2 194047.305 000013.356 0 Digit 0
*Jan 2 194047.441 000013.492 8 Digit 8
*Jan 2 194047.605 000013.656 4 Digit 4
*Jan 2 194047.741 000013.792 7 Digit 7
*Jan 2 194058.393 000024.444
+FCON
```

The following output shows that the fax call is connected from the on-ramp router to the calling party. Class 2 modem tracing continues.

```
+FTSI          +31 703712194"
1d19h %FTSP-6-FAX_CONNECT Reception
*Jan 2 194058.393 RxPhaseA CONNECT
*Jan 2 194058.393 CollectDTMF tty=19, ftsp set time=15723604, con time=15726049, tx
dur=24450 Redialer Serial Number 01234567890123456789

*Jan 2 194058.393 ftsp_onramp_match_digits tty19, redialer in use

*Jan 2 194058.393 ftsp_onramp_match_digits destPat(5710847), matched(7), tag(401)
target (mailtotest@nt4server.allegro.com) RxPhaseB RxTSI

*Jan 2 194058.665 000024.716
+FDCS0,3,0,2,0,0,0,5
RxPhaseB RxDCS

*Jan 2 194100.641 000026.692
OK
RxPhaseB OK PhB
000026.692 AT+FDR

*Jan 2 194101.949 000028.000
```

```

+FCFR

+FDCS0,3,0,2,0,0,0,5
RxPhaseB Rx CFR
RxPhaseB RxDCS

*Jan 2 194102.573 000028.624
CONNECT
RxPhaseB RxCon
RxPhaseC
000028.624DC2

*Jan 2 194130.761 000056.812
+FPTS1,0

+FET2

OK
RxPhaseD RxFPTS
RxPhaseD MCF
RxPhaseD MODEM_FET

*Jan 2 194130.761 RxPhaseD tty=19,ensp set time=15726049,con time=15729286 RxPhaseD Rx
EOP
RxPhaseD MODEM_OK
000056.812 AT+FDR

```

The following output shows that the fax transmission is complete.

```

*Jan 2 194133.469 000059.520
+FHNG00
RxPhaseE Received Hangup Call complete

*Jan 2 194133.533 000059.584
OK
RxPhaseE Received OK Ending Call

```

The following output shows that the calling party disconnects following fax transmission.

```

1d19h %FTSP-6-FAX_DISCONNECT Reception
*Jan 2 194133.533 fap_onramp_end_call disconnect-
1d19h %LINK-3-UPDOWN Interface Serial10, changed state to down
*Jan 2 194134.537 all booleans set
*Jan 2 194134.537 ftsp_do_call_history disc cause=16, Normal connection delete_f_rec()
calling free()

```

Related Commands

Command	Description
debug fax receive all	Displays Class 2 fax tracing information about all on-ramp connections.
debug fax receive called-number	Displays Class 2 fax tracing information about on-ramp connections filtered on a specific called number.
debug fax receive calling-number	Displays Class 2 fax tracing information about on-ramp connections filtered on a specific calling number.

debug fax send all

Use the **debug fax send all** EXEC command to display Class 2 fax protocol tracing information for all off-ramp faxing activities. Use the **no** form of this command to disable debugging output.

[no] debug fax send all

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following example displays output from the **debug fax send all** command. This command, by definition, displays Class 2 information about all off-ramp fax calls as they occur; in this example, only one fax call is being traced.

```
router# debug fax send all
```

The following output shows that the off-ramp gateway is placing a fax call.

```
*Jan 1 175435.703 ftsp_offramp_match_digits phone number to translate 5553413
*Jan 1 175435.703 destPat(5553413), matched(6), prefix() peer_tag(310)
*Jan 1 175435.703 ftsp_offramp_match_digits target 5763413
*Jan 1 175435.743 fap_offcm tty(72), Got dial message000000.000 AT&F\Q0S7=255
```

Class 2 modem tracing begins, including modem initialization.

```
000000.080 A
000000.096 T
000000.128 &F
000000.144 \Q
000000.160 0S7=255
000000.160
OK
```

In the following output, Class 2 modem tracing continues.

```
000000.160 EOV1
000000.192 A
000000.192 TE
000000.208 0
000000.208
OK

000000.208AT+FCLASS=2
000000.288
OK

000000.288 +FDCC=. . ;+FBOR=
```

```
000000.368
OK
```

```
000000.368 AT+FLID
000000.432
OK
```

The following output shows that the off-ramp gateway is dialing out.

```
000000.432 ATDTW5553413

*Jan 1 175436.419 ftsp_setup_for_oc tty72, callid=0x1C
*Jan 1 175436.419 ftsp_setup_for_oc ctl=2, cas grp=-1, snmp_ix=102
*Jan 1 175436.419 ftsp_off_ramp_active_call_init tty72 callid=0x1C,
```

The following output identifies the SMNP index of the off-ramp device.

```
snmp_ix=102
000011.784
+FCON
```

```
Phase A Start
```

The following output shows that the called party has answered and that the fax transmission is beginning. Class 2 modem tracing continues.

```
175449 %FTSP-6-FAX_CONNECT Transmission
*Jan 1 175447.527 TxPhaseA MODEM_FCON
000012.524
+FNSFB5 00 2E 57 46 58 3A 37 2E 30
```

```
Phase B Start
TxPhaseB MODEM_FNSF
000013.276
+FCSI" Allegro Fax machine"
```

```
Phase B Start
TxPhaseB MODEM_FCSI
000013.756
+FDIS1,5,0,2,3,0,1,0
```

```
OK
```

```
Phase B Start
TxPhaseB MODEM_FDIS
TxPhaseB MODEM_OK
```

```
*Jan 1 175449.499 TxPhaseB, tty(72), Tx Speed=14400bps
```

```
*Jan 1 175449.499 000013.756 AT+FDIS
000013.820
OK
```

```
Phase B Start
TxPhaseB MODEM_OK
000013.820 AT+FDT
000020.704
+FDCS0,5,0,2,0,0,0,0
```

```
Phase B Start
TxPhaseB MODEM_FDCS
```

```
*Jan 1 175456.447 calc_min_line_bytes normal resolution
000021.280
CONNECT
```

```
Phase B Start
TxPhaseB MODEM_CONNECT
000021.296
Phase C Start
TxPhaseC MODEM_XON

*Jan 1 175457.139 asfax_txservice tty(72), MPS b000024.788
OK

Tx Phase D Start
TxPhaseD MODEM_OK
Tx Phase D MPS
000027.128
+FPPTS1

OK

Tx Phase D Start
TxPhaseD MODEM_FPTS
RxFPPTS +FPPTS1
TxPhaseD MCF
TxPhaseD MPS
Phase C Start
TxPhaseC MODEM_OK
000027.768
CONNECT

Phase C Start
TxPhaseC MODEM_CONNECT
000027.784
Phase C Start
TxPhaseC MODEM_XON

*Jan 1 175503.687 asfax_txservice tty(72), EOP000032.444
OK

Tx Phase D Start
TxPhaseD MODEM_OK
Tx Phase D EOP
000034.716
+FPPTS1

Tx Phase D Start
TxPhaseD MODEM_FPTS
RxFPPTS +FPPTS1
TxPhaseD MCF
Enabling smtp for receiving data, body_page_number 2, body_page_number_sent 1
000036.272
+FHNG0

TxPhaseE MODEM_FHNG
000036.832
OK

TxPhaseE MODEM_OK
```

The following output shows that the fax transmission is complete.

```
175514 %FTSP-6-FAX_DISCONNECT Transmission
*Jan 1 175512.575 tty(72) fax transmit done
175514 %LINK-3-UPDOWN Interface Serial222, changed state to down
```

Related Commands

Command	Description
debug fax send calling-number	Displays Class 2 fax tracing information about off-ramp connections filtered on a specific called number.
debug fax send specific	Enables debug fax send all command Class 2 fax tracing information to be filtered using the calling number.

debug fax send calling-number

Use the **debug fax send calling-number** EXEC command to display information for a particular outbound calling number. Use the **no** form of this command to disable debugging output.

[no] debug fax send calling-number {*string*}

Syntax Description

string Specifies the telephone number to which the fax transmission was sent. Valid entries are any series of digits that specify the E.164 telephone number.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

Note The **debug fax send calling-number** command works with the **debug fax send specific** command. The **debug fax send specific** command enables Store and Forward Fax to filter the **debug fax send all** command information using only the calling number. You must enter both commands to filter debug information for a specific calling number.

The following example displays output from the **debug fax send calling-number** command. In this example, Store and Forward Fax displays Class 2 information about all off-ramp fax calls for the calling number 555-3414.

```
router# debug fax send specific
router# debug fax send calling-number 5553413
```

The following output shows that the off-ramp gateway is placing a fax call.

```
*Jan 1 175435.703 ftsp_offramp_match_digits phone number to translate 5553413
*Jan 1 175435.703 destPat(5553413), matched(6), prefix() peer_tag(310)
*Jan 1 175435.703 ftsp_offramp_match_digits target 5553413
*Jan 1 175435.743 fap_offcm tty(72), Got dial message000000.000 AT&F\Q0S7=255
```

Class 2 modem tracing begins, including modem initialization.

```
000000.080 A
000000.096 T
000000.128 &F
000000.144 \Q
000000.160 OS7=255
000000.160
OK
```

In the following output, Class 2 modem tracing continues.

```
000000.160 EOV1
000000.192 A
000000.192 TE
000000.208 0
000000.208
OK

000000.208AT+FCLASS=2
000000.288
OK

000000.288 +FDCC=.;+FBOR=
000000.368
OK

000000.368 AT+FLID
000000.432
OK
```

The following output shows that the off-ramp gateway is dialing out.

```
000000.432 ATDTW5553413

*Jan 1 175436.419 ftsp_setup_for_oc tty72, callid=0x1C
*Jan 1 175436.419 ftsp_setup_for_oc ctl=2, cas grp=-1, snmp_ix=102
*Jan 1 175436.419 ftsp_off_ramp_active_call_init tty72 callid=0x1C,
```

The following output identifies the SMNP index of the off-ramp device.

```
snmp_ix=102
000011.784
+FCON

Phase A Start
```

The following output shows that the called party has answered and that the fax transmission is beginning. Class 2 modem tracing continues.

```
175449 %FTSP-6-FAX_CONNECT Transmission
*Jan 1 175447.527 TxPhaseA MODEM_FCON
000012.524
+FNSFB5 00 2E 57 46 58 3A 37 2E 30

Phase B Start
TxPhaseB MODEM_FNSF
000013.276
+FCSI" Allegro Fax machine"

Phase B Start
TxPhaseB MODEM_FCSI
000013.756
+FDIS1,5,0,2,3,0,1,0

OK

Phase B Start
TxPhaseB MODEM_FDIS
TxPhaseB MODEM_OK

*Jan 1 175449.499 TxPhaseB, tty(72), Tx Speed=14400bps

*Jan 1 175449.499 000013.756 AT+FDIS
000013.820
```

```
OK

Phase B Start
TxPhaseB MODEM_OK
000013.820 AT+FDT
000020.704
+FDCS0,5,0,2,0,0,0,0

Phase B Start
TxPhaseB MODEM_FDCS

*Jan 1 175456.447 calc_min_line_bytes normal resolution
000021.280
CONNECT

Phase B Start
TxPhaseB MODEM_CONNECT
000021.296
Phase C Start
TxPhaseC MODEM_XON

*Jan 1 175457.139 asfax_txservice tty(72), MPS b000024.788
OK

Tx Phase D Start
TxPhaseD MODEM_OK
Tx Phase D MPS
000027.128
+FPTS1

OK

Tx Phase D Start
TxPhaseD MODEM_FPTS
RxFPTS +FPTS1
TxPhaseD MCF
TxPhaseD MPS
Phase C Start
TxPhaseC MODEM_OK
000027.768
CONNECT

Phase C Start
TxPhaseC MODEM_CONNECT
000027.784
Phase C Start
TxPhaseC MODEM_XON

*Jan 1 175503.687 asfax_txservice tty(72), EOP000032.444
OK

Tx Phase D Start
TxPhaseD MODEM_OK
Tx Phase D EOP
000034.716
+FPTS1

Tx Phase D Start
TxPhaseD MODEM_FPTS
RxFPTS +FPTS1
TxPhaseD MCF
Enabling smtp for receiving data, body_page_number 2, body_page_number_sent 1
000036.272
+FHNG0
```

```
TxPhaseE MODEM_FHNG  
000036.832  
OK
```

```
TxPhaseE MODEM_OK
```

The following output shows that the fax transmission is complete.

```
175514 %FTSP-6-FAX_DISCONNECT Transmission  
*Jan 1 175512.575 tty(72) fax transmit done  
175514 %LINK-3-UPDOWN Interface Serial222, changed state to down
```

Related Commands

Command	Description
debug fax send all	Displays Class 2 fax tracing information about all off-ramp connections.
debug fax send specific	Enables debug fax send all command Class 2 fax tracing information to be filtered using the calling number.

debug fax send specific

Use the **debug fax send specific** EXEC command to enable filtering information on an outbound calling number. Use the **no** form of this command to disable debugging output.

[no] debug fax send specific

Syntax Description

This command uses no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

Note The **debug fax send specific** command is used in conjunction with the **debug fax send calling-number** command; essentially the **debug fax receive specific** command enables Store and Forward Fax to filter the **debug fax receive all** command information using the calling number.

The following example displays output from the **debug fax send calling-number** command, which has been enabled by using the **debug fax send specific** command. In this example, Store and Forward Fax displays Class 2 information about all off-ramp fax calls for the calling number 555-3414.

```
router# debug fax send specific
router# debug fax send calling-number 5553414
```

The following output shows that the off-ramp gateway is placing a fax call.

```
*Jan 1 175435.703 ftsp_offramp_match_digits phone number to translate 5553413
*Jan 1 175435.703 destPat(5553413), matched(6), prefix() peer_tag(310)
*Jan 1 175435.703 ftsp_offramp_match_digits target 5763413
*Jan 1 175435.743 fap_offcm tty(72), Got dial message000000.000 AT&F\Q0S7=255
```

Class 2 modem tracing begins, including modem initialization.

```
000000.080 A
000000.096 T
000000.128 &F
000000.144 \Q
000000.160 OS7=255
000000.160
OK
```

In the following output, Class 2 modem tracing continues.

```
000000.160 EOV1
000000.192 A
```

```

000000.192 TE
000000.208 0
000000.208
OK

000000.208AT+FCLASS=2
000000.288
OK

000000.288 +FDCC=.;+FBOR=
000000.368
OK

000000.368 AT+FLID
000000.432
OK

```

The following output shows that the off-ramp gateway is dialing out.

```

000000.432 ATDTW5553413

*Jan 1 175436.419 ftsp_setup_for_oc tty72, callid=0x1C
*Jan 1 175436.419 ftsp_setup_for_oc ctl=2, cas grp=-1, snmp_ix=102
*Jan 1 175436.419 ftsp_off_ramp_active_call_init tty72 callid=0x1C,

```

The following output identifies the SMNP index of the off-ramp device.

```

snmp_ix=102
000011.784
+FCON

Phase A Start

```

The following output shows that the called party has answered and that the fax transmission is beginning. Class 2 modem tracing continues.

```

175449 %FTSP-6-FAX_CONNECT Transmission
*Jan 1 175447.527 TxPhaseA MODEM_FCON
000012.524
+FNSFB5 00 2E 57 46 58 3A 37 2E 30

Phase B Start
TxPhaseB MODEM_FNSF
000013.276
+FCSI" Allegro Fax machine"

Phase B Start
TxPhaseB MODEM_FCSI
000013.756
+FDIS1,5,0,2,3,0,1,0

OK

Phase B Start
TxPhaseB MODEM_FDIS
TxPhaseB MODEM_OK

*Jan 1 175449.499 TxPhaseB, tty(72), Tx Speed=14400bps

*Jan 1 175449.499 000013.756 AT+FDIS
000013.820
OK

Phase B Start
TxPhaseB MODEM_OK

```

debug fax send specific

```
000013.820 AT+FDT
000020.704
+FDCS0,5,0,2,0,0,0,0

Phase B Start
TxPhaseB MODEM_FDCS

*Jan 1 175456.447 calc_min_line_bytes normal resolution
000021.280
CONNECT

Phase B Start
TxPhaseB MODEM_CONNECT
000021.296
Phase C Start
TxPhaseC MODEM_XON

*Jan 1 175457.139 asfax_txservice tty(72), MPS b000024.788
OK

Tx Phase D Start
TxPhaseD MODEM_OK
Tx Phase D MPS
000027.128
+FPTS1

OK

Tx Phase D Start
TxPhaseD MODEM_FPTS
Rx FPTS +FPTS1
TxPhaseD MCF
TxPhaseD MPS
Phase C Start
TxPhaseC MODEM_OK
000027.768
CONNECT

Phase C Start
TxPhaseC MODEM_CONNECT
000027.784
Phase C Start
TxPhaseC MODEM_XON

*Jan 1 175503.687 asfax_txservice tty(72), EOP000032.444
OK

Tx Phase D Start
TxPhaseD MODEM_OK
Tx Phase D EOP
000034.716
+FPTS1

Tx Phase D Start
TxPhaseD MODEM_FPTS
Rx FPTS +FPTS1
TxPhaseD MCF
Enabling smtp for receiving data, body_page_number 2, body_page_number_sent 1
000036.272
+FHNG0

TxPhaseE MODEM_FHNG
000036.832
OK
```

```
TxPhaseE MODEM_OK
```

The following output shows that the fax transmission is complete.

```
175514 %FTSP-6-FAX_DISCONNECT Transmission
*Jan  1 175512.575 tty(72) fax transmit done
175514 %LINK-3-UPDOWN Interface Serial222, changed state to down
```

Related Commands

Command	Description
debug fax send all	Displays Class 2 fax tracing information about all off-ramp connections.
debug fax send calling-number	Displays Class 2 fax tracing information about off-ramp connections filtered on a specific called number.

debug fmail client

Use the **debug fmail client** command to display e-mail parameters (such as Mail from and Envelope to and Envelope from) as well as the progress of the SMTP client. Use the **no** form of this command to disable debugging output.

[no] debug fmail client

Syntax Description

This command uses no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following example shows how the **debug fmail client** command traces the component that communicates with the SMTP client on the on-ramp Cisco AS5300.

```
router# debug fmail client
```

In the following output, the fax-mail client is trying to establish a session with an e-mail server.

```
*Jan 1 18:04:39.419: fmccm: tty(1), establishing a connection
*Jan 1 18:04:39.419: fmccm tty(1): Envelope to: uut1@linux2.allegro.com
*Jan 1 18:04:39.419: fmccm tty(1), Mail from user name is fully specified
*Jan 1 18:04:39.419: fmccm: tty(1), Envelope from:
FAX=4085763413@allegrouut1.allegro.com
```

In the following output, the fax-mail client opens a session with e-mail server.

```
*Jan 1 18:04:39.423: fmccm: Opening connection with email host 14.0.0.4

*Jan 1 18:04:39.423: ensp_ind_call: tty1 peer_tag=110 onRamp
18:04:50: %FTSP-6-FAX_CONNECT: Reception
18:05:01: %FTSP-6-FAX_DISCONNECT: Reception
*Jan 1 18:04:59.043: fm_cpd:: tty(1),Received TIFF_PAGE_READY messagfm_cpd:: tty(1),
Received TIFF_PAGE_READY message
*Jan 1 18:04:59.043: fm_cpd:: tty(1),END_OF_FAX_PAGE received
*Jan 1 18:04:59.043: fm_cpd:: tty(1),Received TIFF_PAGE_READY messagfm_cpd:: tty(1),
Received TIFF_PAGE_READY message
18:05:01: %LINK-3-UPDOWN: Interface Serial2:0, changed state to down
*Jan 1 18:05:00.831: fmc_bfc: tty(1): esmtp response status 0
*Jan 1 18:05:00.831: fmc_bfc:: tty(1), Faxmail message id =
002D2000180439695@allegrouut1.allegro.com
*Jan 1 18:05:00.831: fmc_bfc: tty(1): Calling fap_onramp_process_boolean() for cleanup
*Jan 1 18:05:00.831: ensp_do_call_history: disc cause=63, service or option not
available, unspecified
```

Related Commands

Command	Description
debug fmail server	Displays communications with the SMTP server.

debug fmail server

Use the **debug fmail server** EXEC command to display communication with the SMTP server. Use the **no** form of this command to disable debugging output.

[no] debug fmail server

Syntax Description

This command uses no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following output shows how the **debug fmail server** command provides information about cover-page generation and progress of the data that the off-ramp Cisco AS5300 is processing from the SMTP server.

```
router# debug fmail server
```

In the following output, the off-ramp gateway receives an e-mail message from a mail server.

```
from uut1@linux2.allegro.com, ph#in fax=5553413

*Jan 1 175725.383 decode_minaddr (pstn fax=5553413)
*Jan 1 175725.383 decode_minaddr Fax Number5553413
*Jan 1 175725.383 decode_minaddr phone string returned [5763413]tel_number_dial
5763413

*Jan 1 175725.383 create fax payload
*Jan 1 175725.383 ensp_ind_call offRamp
*Jan 1 175725.383 Entering faxmail_server_new_recipient()
*Jan 1 175725.383 envelope_to 35, [fax=5763413@allegrouut1.allegro.com]
*Jan 1 175725.383 allocate_modem mica_last_used 72
*Jan 1 175725.383 allocate_modem microcom_last_used 0
*Jan 1 175725.383 statbits 10420
```

In the following output, the off-ramp gateway looks for a free modem.

```
*Jan 1 175725.383 statbits2 5
*Jan 1 175725.383 statbits 10420
*Jan 1 175725.383 statbits2 5
*Jan 1 175725.383 statbits 10420
*Jan 1 175725.383 statbits2 5
*Jan 1 175725.383 statbits 10420
*Jan 1 175725.383 statbits2 5
*Jan 1 175725.383 statbits 10420
*Jan 1 175725.387 statbits2 5
*Jan 1 175725.387 statbits 10020
*Jan 1 175725.387 statbits2 1
```

In the following output, the off-ramp gateway finds and seizes an available MICA modem.

```
*Jan 1 175725.387 allocate_modem found a mica modem
*Jan 1 175725.391 allocate_modem seizing modem 72
*Jan 1 175725.391 create_fax_record tty72
*Jan 1 175725.391 cover page is enabled for fax=5763413@allegrouut1.allegro.com

*Jan 1 175725.391 fax_record->tel_number_dial 5763413
*Jan 1 175725.391 Total rcpt so far 1
rfc_payload->envelope_from 24, [uut1@linux2.allegro.com]
```

In the following output, the off-ramp gateway matches the MMoIP dial peer information.

```
*Jan 1 175725.399 ensp_offramp_match_digits destPat(5763413), matched(6), tag(300)
target ()
*Jan 1 175725.399 decode_minaddr (pstn fax=5763413@allegrouut1.allegro.com)
*Jan 1 175725.399 decode_minaddr Fax Number5763413
*Jan 1 175725.399 decode_minaddr phone string returned [5763413]from_personal_name 4,
[uut1]
cover_page_from1 8, ["uut1", ]

*Jan 1 175725.399 >>> from_raw 23, [uut1@linux2.allegro.com]
*Jan 1 175725.399 Non-digit character encountered [u]cover_page_from2
[uut1@linux2.allegro.com]
```

In the following output, the off-ramp gateway displays the data included in the Store and Forward Fax-generated cover page.

```
//Cover page
-----
Title:          This is the offramp

To:            5553413

From:          "uut1", uut1@linux2.allegro.com

Date:          Thu, 21 Jan 1999 10:44:21 -0800

Subject:       test

-----
]

*Jan 1 17:57:25.399: Calling text2fax_data_handler for cover page
*Jan 1 17:57:25.411: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.411: faxmail_server_put_buffer: buffer_info == BUFF_END_OF_PART
*Jan 1 17:57:25.415: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.415: faxmail_server_put_buffer: buffer_info == BUFF_END_OF_PART
*Jan 1 17:57:25.415: Returned buffer length: 624 (mime == text)
*Jan 1 17:57:25.415: faxmail_server_put_buffer: buffer_info == BUFF_END_OF_PART
*Jan 1 17:57:25.415: [
test
]

*Jan 1 17:57:25.415: Calling text2fax_data_handler - TEXT_BODY_PAGE
*Jan 1 17:57:25.431: Authentication bypassed...not enabled
```

In the following output, the off-ramp gateway places the call to the receiving fax machine.

```
*Jan 1 17:57:25.431: Sending dial messages now
*Jan 1 17:57:25.431: faxmail_server_send_dial_message to fap 5763413
*Jan 1 17:57:25.431: send DIAL
*Jan 1 17:57:25.535: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.535: faxmail_server_put_buffer: buffer_info == BUFF_END_OF_PART
```

```
*Jan 1 17:57:25.535: Returned buffer length: 624 (mime == text)
*Jan 1 17:57:25.535: Got a page with only returns and newline's - setting
buffer_length=0
*Jan 1 17:57:25.535: faxmail_server_put_buffer: buffer_info == BUFF_END_OF_PART
*Jan 1 17:57:25.535: []

*Jan 1 17:57:25.535: Calling text2fax_data_handler - TEXT_BODY_PAGE
*Jan 1 17:57:25.535: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.539: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.547: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.551: Returned buffer length: 1548 (mime != text)
*Jan 1 17:57:25.555: faxmail_server_put_buffer: buffer_info == BUFF_END_OF_PART
*Jan 1 17:57:25.555: Returned buffer length: 624 (mime == text)
*Jan 1 17:57:25.555: faxmail_server_put_buffer: buffer_info == BUFF_LAST
*Jan 1 17:57:25.555: []

*Jan 1 17:57:25.555: Calling text2fax_data_handler - TEXT_BODY_PAGE
*Jan 1 17:57:25.555: Stopping smtp from receiving data, fax_payload->body_pages 2,
body_page_number_sent 0
*Jan 1 17:57:25.555: All reserved modems have been previous dialed.
```

In the following output, the receiving fax machine answers the call from the off-ramp gateway.

```
17:57:38: %FTSP-6-FAX_CONNECT: Transmission
```

The following output shows that the transmission is complete.

```
17:58:03: %FTSP-6-FAX_DISCONNECT: Transmission
*Jan 1 17:58:01.619: Entering faxmail_server_fap_done(f_rec: 616EB70C, fmode:
5) faxmail_server_fap_done: status: 23, num_pages: 2

17:58:03: %LINK-3-UPDOWN: Interface Serial1:0, changed state to down
*Jan 1 17:58:10.559: ensp_do_call_history: disc cause=16, normal call clearing.
*Jan 1 17:58:10.559: Remove fax_record from Q..., frec 616EB70C
*Jan 1 17:58:10.559: delete_f_rec(): calling free()
*Jan 1 17:58:10.559: fax_record 616EB70C is deleted
*Jan 1 17:58:10.559: Entering faxmail_server_dispose_context (to
delete fax_payload: 0x612B4B40)
*Jan 1 17:58:10.559: delete_f_rec(): calling free()
*Jan 1 17:58:10.559: delete_fax_payload: fax_payload freed !!!
```

Related Commands

Command	Description
debug fmail client	Displays e-mail parameters (such as Mail from and Envelope to and Envelope from) as well as the progress of the SMTP client.

debug mmoip aaa

Use the **debug mmoip aaa** EXEC command to display output relating to AAA services with Store and Forward Fax. Use the **no** form of this command to disable debugging output.

[no] debug mmoip aaa

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following output shows how the **debug mmoip aaa** command provides information about AAA on-ramp or off-ramp authentication:

```
router# debug mmoip aaa
5d10h:fax_aaa_begin_authentication:User-Name = mmoip-b.cisco.com
5d10h:fax_aaa_begin_authentication:fax_account_id_origin = GATEWAY_ID
5d10h:fax_aaa_end_authentication_callback:Authentication successful
```

The following output shows how the **debug mmoip aaa** command provides information about AAA off-ramp accounting:

```
router# debug mmoip aaa
5d10h:fax_aaa_start_accounting:User-Name = mmoip-b.cisco.com
5d10h:fax_aaa_start_accounting:Calling-Station-Id = gmercuri@mail-server.cisco.com
5d10h:fax_aaa_start_accounting:Called-Station-Id = fax=571-0839@mmoip-b.cisco.com
5d10h:fax_aaa_start_accounting:fax_account_id_origin = GATEWAY_ID
mmoip-b#ax_aaa_start_accounting:fax_msg_id = <37117AF3.3D98300E@mail-server.cisco.com>
5d10h:fax_aaa_start_accounting:fax_pages = 2
5d10h:fax_aaa_start_accounting:fax_coverpage_flag = TRUE
5d10h:fax_aaa_start_accounting:fax_modem_time = 26/32
5d10h:fax_aaa_start_accounting:fax_connect_speed = 14400bps
5d10h:fax_aaa_start_accounting:fax_recipient_count = 1
5d10h:fax_aaa_start_accounting:fax_auth_status = USER SUCCESS
5d10h:fax_aaa_start_accounting:gateway_id = mmoip-b.cisco.com
5d10h:fax_aaa_start_accounting:call_type = Fax Send
5d10h:fax_aaa_start_accounting:port_used = slot:0 modem port:0
5d10h:fax_aaa_do_offramp_accounting tty(6), Stopping accounting

5d10h:fax_aaa_stop_accounting:ftdb->cact->generic.callActiveTransmitBytes = 18038
5d10h:fax_aaa_stop_accounting:ftdb->cact->generic.callActiveTransmitPackets = 14
```

The following output shows how the **debug mmoip aaa** command provides information about AAA on-ramp accounting:

```
router# debug mmoip aaa
5d10h:fax_aaa_start_accounting:User-Name = mmoip-b.cisco.com
5d10h:fax_aaa_start_accounting:Calling-Station-Id = FAX=408@mail-from-hostname.com
5d10h:fax_aaa_start_accounting:Called-Station-Id = FAX=5710839@mail-server.cisco.com
5d10h:fax_aaa_start_accounting:fax_account_id_origin = GATEWAY_ID
5d10h:fax_aaa_start_accounting:fax_msg_id = 00391997233216263@mmoip-b.cisco.com
5d10h:fax_aaa_start_accounting:fax_pages = 2
5d10h:fax_aaa_start_accounting:fax_modem_time = 22/32
5d10h:fax_aaa_start_accounting:fax_connect_speed = 14400bps
5d10h:fax_aaa_start_accounting:fax_auth_status = USER SUCCESS
5d10h:fax_aaa_start_accounting:email_server_address = 1.14.116.1
5d10h:fax_aaa_start_accounting:email_server_ack_flag = TRUE
5d10h:fax_aaa_start_accounting:gateway_id = mmoip-b.cisco.com
5d10h:fax_aaa_start_accounting:call_type = Fax Receive
5d10h:fax_aaa_start_accounting:port_used = Cisco Powered Fax System slot:1 port:4
5d10h:fax_aaa_do_onramp_accounting tty(5), Stopping accounting

5d10h:fax_aaa_stop_accounting:endb->cact->generic.callActiveTransmitBytes = 26687
5d10h:fax_aaa_stop_accounting:ftdb->cact->generic.callActiveReceiveBytes = 18558
5d10h:fax_aaa_stop_accounting:ftdb->cact->generic.callActiveReceivePackets = 14
```

debug mmoip send email

Use the **debug mmoip send email** EXEC command to test connectivity between the on-ramp gateway and the e-mail server by sending a test e-mail to a specified e-mail address. Use the **no** form of this command to disable debugging output.

[no] debug mmoip send email {*string*}

Syntax Description

string Specifies the e-mail address of the sender; for example, `george@mail-server.com`.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The **debug mmoip send email** command is used to test connectivity between the on-ramp gateway and the e-mail server. Basically, this **debug** command sends an e-mail message to the recipient specified in the e-mail address string. There is no specific output associated with the **debug mmoip send email** command; to see how the on-ramp gateway and e-mail server interact when processing the test e-mail message, enable the **debug fmail client** command.

The following example tests connectivity between the on-ramp gateway and the e-mail server by sending a test e-mail message to `ilya@mail-server.com`.

```
router# debug fmail client
router# debug mmoip send email ilya@mail-server.com

router#
01:22:59:faxmail_client_send_test:Sending the test message to
ilya@mail-server.com from testing@mmoip-a.cisco.com...
01:22:59:faxmail_client_send_test:Opening client engine.
01:22:59:faxmail_client_send_test:Sending 59 bytes ...
01:22:59:faxmail_client_send_test:Done sending test email.
```

debug mmoip send fax

Use the **debug mmoip send fax** EXEC command to send an off-ramp test fax. Use the **no** form of this command to disable debugging output.

[no] debug mmoip send fax{*string*}

Syntax Description

string Specifies the E.164 telephone number to be used for sending the test fax.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The **debug mmoip send fax** command is used to test connectivity between the off-ramp gateway and a recipient fax device. Basically, this debug command sends a test fax transmission to the recipient specified in the telephone number string. There is no specific output associated with the **debug mmoip send fax** command; to see how the off-ramp gateway and fax device interact when processing the test fax, enable the **debug fax send all** command.

The following example sends a test fax message to the telephone number 5550839:

```
router# debug fax send all
router# debug mmoip send fax 5550839
```

The following output shows that the off-ramp gateway is placing a fax call.

```
01:28:18:ftsp_offramp_match_digits:phone number to translate:5550839
01:28:18: destPat(5.....), matched(1), prefix() peer_tag(1)
01:28:18:ftsp_offramp_match_digits:target:710839
01:28:18:fap_offcm:tty(4), Got dial message00:00:00.000:AT&F\Q0S7=255
```

Class 2 modem tracing begins, including modem initialization.

```
00:00:00.008:AA
00:00:00.068:TT
00:00:00.128:&F\Q0S7=255
00:00:00.128:
OK

00:00:00.128:E0V1
00:00:00.140:ATE0
OK

00:00:00.140:AT+FCLASS=2
00:00:00.148:
OK

00:00:00.148:+FDCC=.;+FBOR=
00:00:00.168:AT+FLID
```

```
00:00:00.180:  
OK
```

```
00:00:00.180:ATDTW710839
```

The following output shows that the fax transmission is complete; in this particular example, there was a transmission error, and the modem timed out.

```
01:28:25:ftsp_setup_for_oc:tty4, callid=0xA  
01:28:25:ftsp_setup_for_oc ctl=0, cas grp=-1, snmp_ix=30  
01:28:25:ftsp_off_ramp_active_call_init tty4 callid=0xA, snmp_ix=30  
01:29:18:fap_offpmt:tty(4), TxPhaseA:modem timeout  
01:29:18:%FTSP-6-FAX_DISCONNECT:Transmission error
```

debug mmoip transfer

Use the **debug mmoip transfer** EXEC command to send output of the TIFF writer to a TFTP server. Use the **no** form of this command to disable debugging output.

[no] debug mmoip transfer {*prefix-filename* *tftp-server-name*}

Syntax Description

<i>prefix-filename</i>	Specifies the name of the TIFF file. The format for the TIFF file name is “telephone-number.TIFF.”
<i>tftp-server-name</i>	Identifies the TFTP server to which the output from the TIFF writer is sent.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The **debug mmoip transfer** sends the content of the fax data received to the TFTP server named by the *tftp-server-name* variable into the file identified by the *prefix-filename* variable. Each page of the fax transmission is a separate file, designated by the letter p, followed by the page number.

For example, the following command transfers the received fax content to a TFTP server named keyer. The first page of the transmission goes to the file /tftpboot/test/testp1.tiff, the second page goes to the file named /tftpboot/test/testp2.tiff and so on.

```
router# debug mmoip transfer /tftpboot/test/test keyer
```

The named files must exist on the TFTP server and be writable for the debug operation to be successful.

debug mta send all

Use the **debug mta send all** EXEC command to display output for all of the on-ramp client connections. Use the **no** form of this command to disable debugging output.

[no] debug mta send all

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

This display shows the messages exchanged (for example, the handshake) between the e-mail server and the on-ramp gateway.

```
router# debug mta send all
All email send debugging is on
router#
```

The following output shows that the calling party is connected to the on-ramp router. R specifies the information received from the mail server. S specifies the messages sent from the on-ramp gateway to the mail server.

```
1d19h: %FTSP-6-FAX_CONNECT: Receptionssocket 0 attempting to connect to IP address
14.0.0.1
socket 0 readable for first time - let's try to read it
R: 220 nt4server.allegro.com ESMTP Server (Microsoft Exchange Internet Mail Service
5.5.1960.3) ready
S: EHLO allegrouut1.allegro.com
R: 250-nt4server.allegro.com supports the following extensions:
R: 250-XEXCH50
R: 250-HELP
R: 250-ETRN
R: 250-DSN
R: 250-SIZE 0
R: 250-AUTH=LOGIN
R: 250 TLS
S: MAIL FROM:<FAX=4085763414@allegrouut1.allegro.com> RET=HDRS
R: 250 OK - mail from <FAX=4085763414@allegrouut1.allegro.com>
S: RCPT TO:<test@nt4server.allegro.com> NOTIFY=SUCCESS,FAILURE
ORCPT=rfc822;FAX+3D4085763414@allegrouut1.allegro.com
R: 250 OK - Recipient <test@nt4server.allegro.com>
R: 354 Send data. End with CRLF.CRLF
S: Received: (originator..... slot:1 port:16) by allegrouut1.allegro.com for
<test@nt4server.allegro.com> (with Cisco NetWorks); Sun, 02 Jan 2000 19:30:56 +0000
S: To: "14085710847" <test@nt4server.allegro.com>
S: Message-ID: <00152000193056665@allegrouut1.allegro.com>
S: Date: Sun, 02 Jan 2000 19:30:56 +0000
S: Subject: onramp test
```

```

S: X-Mailer: IOS (tm) 5300 Software (C5300-IS-M)
S: MIME-Version: 1.0
S: Content-Type: multipart/mixed;
S:  boundary="yradnuoB=_00142000193054321.allegrouut1allegro.com"

1d19h: %FTSP-6-FAX_DISCONNECT: ReceptionS: From: "+31 703712194"
<FAX=4085763414@allegrouut1.allegro.com>
S: X-Account-Id: null
S: --yradnuoB=_00142000193054321.allegrouut1allegro.com
S: Content-ID: <00162000193129665@allegrouut1.allegro.com>
S: Content-Type: image/tiff; application=faxbw
S: Content-Transfer-Encoding: base64
writing lingering data for socket 0
writing lingering data for socket 0
writing lingering data for socket 0
writing lingering data for socket 0
writing lingering data for socket 0
writing lingering data for socket 0
writing lingering data for socket 0
writing lingering data for socket 0

1d19h: %LINK-3-UPDOWN: Interface Serial1:0, changed state to downwriting lingering data
for socket 0
S: --yradnuoB=_00142000193054321.allegrouut1allegro.com--
Sending terminating dot ...(socket=0)
S: .
R: 250 OK
S: QUIT

```

The following output shows that the fax transmission is complete.

```

R: 221 closing connection
Freeing SMTP ctx at 0x613C8620
returned from work_routine, context freed

```

Related Commands

Command	Description
debug mta receive all	Display output for all of the off-ramp client connections.
debug mta send rcpt-to	Display output for a specific on-ramp SMTP client connection during an e-mail transmission.

debug mta send rcpt-to

Use the **debug mta send rcpt-to** EXEC command to display output for a specific on-ramp SMTP client connection during an e-mail transmission. Use the **no** form of this command to disable debugging output.

[no] debug mta send rcpt-to{string}

Syntax Description

string Specifies the e-mail address.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following example shows debugging information displayed when the **debug mmoip send email** command has been enabled and the SMTP client is sending an e-mail message.

```
router# debug mta send all
All email send debugging is on
router# debug mmoip send email ilyau@company.com

router# socket 0 attempting to connect to IP address 172.69.95.82
socket 0 readable for first time - let's try to read it
R:220 quisp.cisco.com ESMTP Sendmail 8.8.4-Cisco.1/8.6.5 ready at Tue, 6
Apr 1999 13:35:39 -0700 (PDT)
S:EHLO mmoip-c.cisco.com
R:250-quisp.cisco.com Hello [172.22.95.16], pleased to meet you
R:250-EXPN
R:250-VERB
R:250-8BITMIME
R:250-SIZE
R:250-DSN
R:250-ETRN
R:250-XUSR
R:250 HELP
S:MAIL FROM:<testing@> RET=HDRS
R:250 <testing@>... Sender ok
S:RCPT TO:<ilyau@cisco.com> NOTIFY=SUCCESS ORCPT=rfc822;testing@
R:250 <ilyau@cisco.com>... Recipient ok
R:354 Enter mail, end with "." on a line by itself
S:Received:(Cisco Powered Fax System) by mmoip-c.cisco.com for
<ilyau@cisco.com> (with Cisco NetWorks); Fri, 17 Oct 1997 14:54:27 +0800
S:To: <ilyau@cisco.com>
S:Message-ID:<000F1997145427146@mmoip-c.cisco.com>
S>Date:Fri, 17 Oct 1997 14:54:27 +0800
S:Subject:mmoip-c subject here
S:X-Mailer:IOS (tm) 5300 Software (C5300-IS-M)
S:MIME-Version:1.0
S:Content-Type:multipart/mixed;
```

```
S: boundary="yradnuoB=_000E1997145426826.mmoip-ccisco.com"  
S:From: "Test User" <testing@>  
S:--yradnuoB=_000E1997145426826.mmoip-ccisco.com  
S:Content-ID:<00101997145427150@mmoip-c.cisco.com>  
S:--yradnuoB=_000E1997145426826.mmoip-ccisco.com--  
Sending terminating dot ...(socket=0)  
S:.  
R:250 NAA09092 Message accepted for delivery  
S:QUIT  
R:221 quisp.cisco.com closing connection  
Freeing SMTP ctx at 0x6121D454  
returned from work_routine, context freed
```

Related Commands

Command	Description
debug mta send all	Displays output for all of the on-ramp client connections.

debug text-to-fax

Use the **debug text-to-fax** EXEC command to show information relating to the off-ramp text-to-fax conversion. Use the **no** form of this command to disable debugging output.

[no] debug text-to-fax

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following debug output shows the off-ramp text-to-fax conversion.

```
router# debug text-to-fax
Text to fax debugging is on
router#6d03h: text2fax_data_handler: START_OF_CONNECTION
6d03h: text2fax_data_handler: new_context
6d03h: text2fax_data_handler: resolution: fine
6d03h: text2fax_data_handler: buffer size: 50
6d03h: text2fax_put_buffer: START_OF_FAX_PAGE
6d03h: text2fax_put_buffer: START_OF_FAX_PAGE
6d03h: text2fax_put_buffer: END_OF_FAX_PAGE. Dial now ...if not in progress

6d03h: text2fax_data_handler: START_OF_DATA
6d03h: text2fax_data_handler: END_OF_DATA
6d03h: text2fax_data_handler: Dispose context
6d03h: text2fax_data_handler: START_OF_CONNECTION
6d03h: text2fax_data_handler: END_OF_CONNECTION
6d03h: %FTSP-6-FAX_CONNECT: Transmission
6d03h: %FTSP-6-FAX_DISCONNECT: Transmission
6d03h: %LINK-3-UPDOWN: Interface Serial1:22, changed state to down
```

debug tiff reader

Use the **debug tiff reader** EXEC command to display output about the off-ramp TIFF reader. Use the **no** form of this command to disable debugging output.

[no] debug tiff-reader

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following debug example displays information about the off-ramp TIFF reader.

```
router# debug tiff reader
*Jan 1 18:59:13.683: tiff_reader_data_handler: new context
*Jan 1 18:59:13.683: tiff_reader_data_handler: resolution: standard
*Jan 1 18:59:13.683: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() ENGINE_START/DONE gggg(pl 616E9994)

*Jan 1 18:59:13.691: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.699: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)

*Jan 1 18:59:13.703: tiff_reader_put_buffer: START_OF_FAX_PAGEi>> tiff_reader_engine()
case FAX_EBUFFER gggg

*Jan 1 18:59:13.711: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.719: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.727: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.735: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.743: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.751: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.759: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.767: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.775: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
```

```

i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.787: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.795: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.803: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.811: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.819: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.827: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.835: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.843: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.851: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.863: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.871: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.879: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.887: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.895: tiff_reader_data_handler: buffer size: 1524
*Jan 1 18:59:13.903: tiff_reader_data_handler: buffer size: 1524i>>
tiff_reader_engine() case FAX_EBUFFER pppp(pl 616E9994)
i>> tiff_reader_engine() case FAX_EBUFFER gggg

*Jan 1 18:59:13.907: tiff_reader_data_handler: buffer size: 311i>> tiff_r_finish()
END_OF_FAX_PAGE pppp

*Jan 1 18:59:13.907: tiff_reader_put_buffer: END_OF_FAX_PAGE. Dial now ...if not in
progress
*Jan 1 18:59:13.907: tiff_reader_data_handler: END_OF_DATA
*Jan 1 18:59:13.907: tiff_reader_data_handler: BUFF_END_OF_PART
*Jan 1 18:59:13.907: tiff_reader_data_handler: Dispose context

```

Related Commands

Command	Description
debug tiff writer	Displays output about the on-ramp TIFF writer.

debug tiff writer

Use the **debug tiff writer** EXEC command to display output about the on-ramp TIFF writer. Use the **no** form of this command to disable debugging output.

[no] debug tiff-writer

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command History

Release	Modification
12.0(4)T	This command was introduced.

Examples

The following debug example shows information about the off-ramp TIFF writer.

```
router# debug tiff writer
*Jan 1 18:54:59.419: tiff_writer_data_process: START_OF_CONNECTION
18:55:10: %FTSP-6-FAX_CONNECT: Reception
*Jan 1 18:55:14.903: tiff_writer_data_process: START_OF_FAX_PAGE
*Jan 1 18:55:14.903: tiff_writer_data_process: tiff file created = 2000:01:01 18:55:14
18:55:21: %FTSP-6-FAX_DISCONNECT: Reception
*Jan 1 18:55:19.039: tiff_writer_data_process: END_OF_CONNECTION or ABORT_CONNECTION
*Jan 1 18:55:19.039: tiff_writer_put_buffer: END_OF_FAX_PAGE

*Jan 1 18:55:19.039: send TIFF_PAGE_READY
*Jan 1 18:55:19.039: send TIFF_PAGE_READY
18:55:21: %LINK-3-UPDOWN: Interface Serial2:0, changed state to down
```

Related Commands

Command	Description
debug tiff reader	Displays output about the on-ramp TIFF reader.

