

V150.1 MER Support in SDP Passthrough Mode

The Cisco V.150.1 Minimum Essential Requirements (MER) feature complies with the requirements of the National Security Agency (NSA) SCIP-216 Minimum Essential Requirements for V.150.1 recommendation, which provides for four states: audio, voice-band data (VBD), modem relay, and T.38. This feature is added in CUBE (IP-IP gateway) for V.150.1 calls to traverse a CUBE in SDP passthrough flow-through mode.

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Feature Information for V.150.1 MER Support for SDP Passthrough

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 1: Feature Information for V.150.1 MER Support for SDP Passthrough

Feature Name	Releases	Feature Information
V.150.1 MER Support for SDP Passthrough	Baseline Functionality	The Cisco V.150.1 Minimum Essential Requirements (MER) feature complies with the requirements of the National Security Agency (NSA) SCIP-216 Minimum Essential Requirements for V.150.1 recommendation, which provides for four states: audio, voice-band data (VBD), modem relay, and T.38. This feature is added in CUBE (IP-IP gateway) for V.150.1 calls to traverse a CUBE in SDP passthrough flow-through mode. The following commands were introduced or modified: **pass-thru content sdp mode non-rtp** and **voice-class sip pass-thru content sdp mode non-rtp**

Information About VER.150.1 MER Support in SDP Passthrough Mode

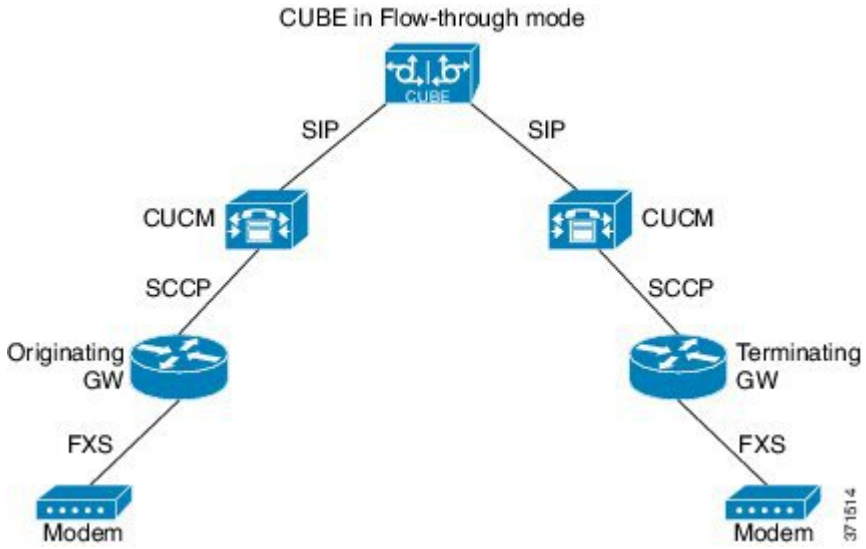
V.150.1 MER Support in SDP Passthrough Mode

V.150.1 is an ITU standard for relaying modem or fax transmission that uses state signaling event (SSE) packets to trigger the transition from audio to modem-relay mode or fax-relay mode. The SSE headers are carried in the RTP packet. After call setup, in-band signaling through Simple Packet Relay Transport (SPRT) and SSE messages is used to transition from one state to another. SPRT packets (non-RTP packets) carry the data after the digital signal processor (DSP) transitions into modem relay mode. UDPTL packets carry the data after the DSP transitions into fax-relay mode.

This feature is added in CUBE (IP-to-IP gateway) to support the V.150.1 MER modem relay in SDP passthrough mode. This is of importance when CUBE is in the media path between V.150.1 MER supported gateways and needs to handle non-RTP packets (such as SPRT packets).

Modem Relay Topology

Figure 1: Topology—Modem Relay



How to Configure V.150.1 MER Support for SDP Passthrough

Configuring V.150.1 MER Support for SDP Passthrough

SUMMARY STEPS

1. **enable**

2. **configure terminal**
3. Set passthrough SDP mode to non-RTP:
   - **voice-class sip pass-thru content sdp mode non-rtp** in the dial-peer configuration mode.
   - **pass-thru content sdp mode non-rtp** in the global VoIP SIP configuration mode.
4. **end**

DETAILED STEPS

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Device> enable`	Enables privileged EXEC mode. Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

Step 3	Set passthrough SDP mode to non-RTP:
	• **voice-class sip pass-thru content sdp mode non-rtp** in the dial-peer configuration mode.
	• **pass-thru content sdp mode non-rtp** in the global VoIP SIP configuration mode.
	Example:
	In dial-peer configuration mode
	`!Setting passthrough SDP mode for one dial peer only`
	`Device (config)#dial-peer voice 20 voip`
	`Device (config-dial-peer)#voice-class sip pass-thru content sdp mode non-rtp`
	`Device (config-dial-peer)#end`
	Example:
	In global VoIP SIP mode
	`!Setting passthrough SDP mode globally`
	`Device(config)#voice service voip`
	`Device (conf-voi-serv)#sip`
	`Device (conf-serv-sip)#pass-thru content sdp mode non-rtp`
	`Device (conf-serv-sip)#end`	

Step 4	**end**	Exits to privileged EXEC mode.

Verifying V.150.1 MER Support in SDP Passthrough Mode

SUMMARY STEPS

1. **enable**
2. **debug ccsip verbose**

DETAILED STEPS

Procedure

Step 1 **enable**

Example:

```
Device> enable
```

Enables privileged EXEC mode.

Step 2 **debug ccsip verbose**

Example:

```
Device# debug ccsip verbose

010362: *Jan 31 12:34:00.148: //31/14B4F1000000/SIP/Function/sipSPI_ipip_SetSdpPthruCfg:
010363: *Jan 31 12:34:00.148: //31/14B4F1000000/SIP/Function/sipSPI_ipip_IsSDPPassthruEnabled:
010364: *Jan 31 12:34:00.148: //31/14B4F1000000/SIP/Info/critical/8192/sipSPI_ipip_IsSDPPassthruEnabled:
  - 1
010365: *Jan 31 12:34:00.148: //31/14B4F1000000/SIP/Function/sipSPI_ipip_SetSDPPassthruMode:
010366: *Jan 31 12:34:00.148: //31/14B4F1000000/SIP/Info/info/128/sipSPI_ipip_SetSDPPassthruMode:
SDP Passthru Mode is set to - 1

011365: *Jan 31 12:34:02.604: //31/14B4F1000000/SIP/Function/sipSPIGetStream:
011366: *Jan 31 12:34:02.604: //32/14B4F1000000/SIP/Info/info/128/sipSPI_ipip_UpdatePthruStreamRtcpInfo:
 Setting stream xmit function to voip_udp_xmit
011367: *Jan 31 12:34:02.604: //32/14B4F1000000/SIP/Function/sipSPIGetRSVPIPTos
```