



SIP UPDATE Message per RFC 3311

The SIP UPDATE Message per RFC 3311 feature provides Session Description Protocol (SDP) support for Session Initiation Protocol (SIP)-to-SIP calls. The SIP Service Provider Interface (SPI) is modified to support the following media changes using the UPDATE message:

- Early dialog SIP-to-SIP media changes.
- Mid dialog SIP-to-SIP media changes.

The Support for SIP UPDATE Message Per RFC 3311 feature is enabled by default on the Cisco Unified Border Element (UBE) and no configuration is required.

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Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table.

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

Prerequisites for SIP UPDATE Message per RFC 3311

- At least one offer or answer negotiation must be completed for Cisco UBE to handle the UPDATE message with SDP.

- An early dialog UPDATE message with SDP is processed only when both endpoints support the UPDATE message.
- For early dialog, both SIP endpoints must support PRACK and UPDATE method. Initial Offer-Answer must be completed with reliable provisional responses.

Cisco Unified Border Element

- Cisco IOS Release 15.1(3)T or a later release must be installed and running on your Cisco Unified Border Element.

Cisco Unified Border Element (Enterprise)

- Cisco IOS XE Release 3.6S or a later release must be installed and running on your Cisco ASR 1000 Series Router.

Restrictions for SIP UPDATE Message per RFC 3311

- An UPDATE message with SDP is not supported for SIP-to-H323 calls.
- An UPDATE message with SDP with a fully qualified domain name (FQDN) is not supported.
- Contact information in the UPDATE message is not supported.
- A retransmitted UPDATE message with SDP is ignored by the SIP stack. No response is sent for retransmitted UPDATE messages.
- CUBE rejects UPDATE with SDP in early dialog when peer SIP leg does not support UPDATE.

Information About SIP UPDATE Message per RFC 3311

The SIP Update per RFC 3311 feature uses existing mid-call SDP processing logic to negotiate the Offer-Answer with UPDATE, so all media features supported in CUBE with Re-INVITE are supported with UPDATE.

The images below illustrate the call flows when one call-leg supports UPDATE and the other leg does not support UPDATE in early dialog and mid-call dialog.

Figure 1: Early Dialog Update with SDP and Peer Leg does not support UPDATE

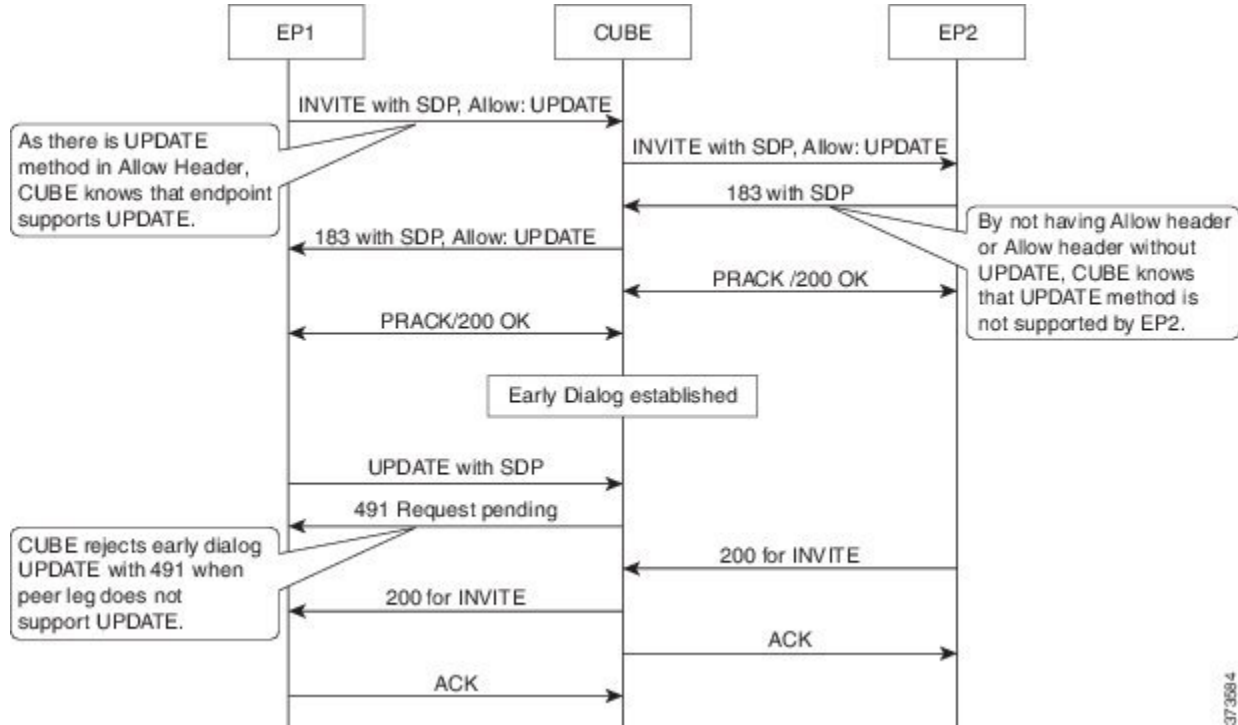
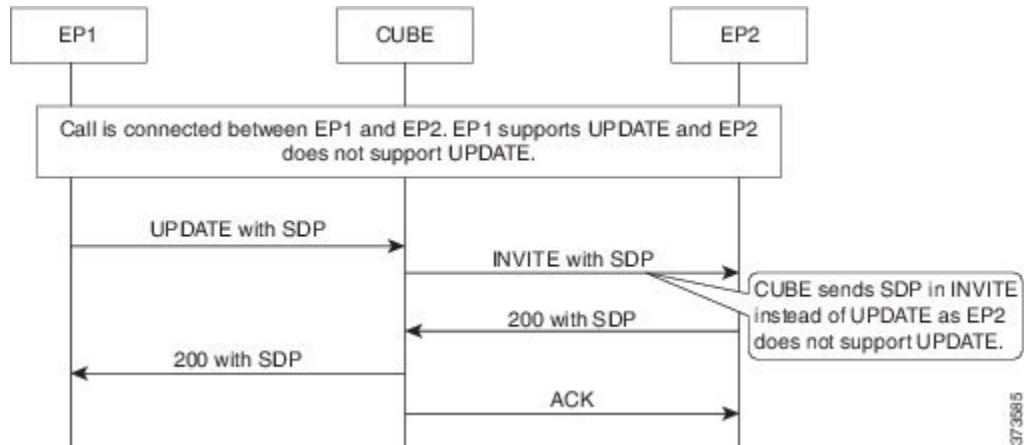


Figure 2: Mid-Dialog Update with SDP and Peer Leg does not support UPDATE



Feature Information for the SIP UPDATE Message per RFC 3311

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.

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Table 1: Feature Information for Support for SIP UPDATE Message per RFC 3311

Feature Name	Releases	Feature Information
Support for SIP UPDATE Message per RFC 3311	15.1(3)T	<p>The Support for SIP UPDATE Message per RFC 3311 feature provides Session Description Protocol (SDP) support for Session Initiation Protocol (SIP)-to-SIP calls. The SIP Service Provider Interface (SPI) is modified to support the following media changes using the UPDATE message:</p> <ul style="list-style-type: none"> • Early dialog SIP-to-SIP media changes. • Mid dialog SIP-to-SIP media changes. <p>In Cisco IOS Release 12.2(25)S, this feature was implemented on the Cisco Unified Border Element.</p>

Feature Name	Releases	Feature Information
Support for SIP UPDATE Message per RFC 3311	Cisco IOS XE Release 3.6S	<p>The Support for SIP UPDATE Message per RFC 3311 feature provides Session Description Protocol (SDP) support for Session Initiation Protocol (SIP)-to-SIP calls. The SIP Service Provider Interface (SPI) is modified to support the following media changes using the UPDATE message:</p> <ul style="list-style-type: none">• Early dialog SIP-to-SIP media changes.• Mid dialog SIP-to-SIP media changes. <p>In Cisco IOS XE Release 3.6S, this feature was implemented on the Cisco Unified Border Element (Enterprise).</p>

