CHAPTER 52

Integration of Resource Management and SIP

As per IETF RFC 3312, call endpoints can determine whether resources are fully reserved for a media stream before using it. This feature is useful when separate quality of service (QoS) signaling, such as Resource ReSerVation Protocol (RSVP), is used. To accomplish this, RFC 3312 defines three new a=lines at media stream granularity. Endpoints use these lines to signal reservation information and their preconditions for adopting the new Session Description Protocol (SDP).

Cisco Unified Border Element (SP Edition) was formerly known as Integrated Session Border Controller and may be commonly referred to in this document as the session border controller (SBC).

Note For Cisco IOS XE Release 2.4 and later, this feature is supported in the unified model only.

Feature History for Integration of Resource Management and SIP Support

Release	Modification
Cisco IOS XE Release 2.4	This feature was introduced on the Cisco IOS XR along with support for the unified model.

Contents

This module contains the following sections:

Restrictions for Integration of Resource Management

The restrictions for integration of resource management are:

- When this feature is implemented, Cisco Unified Border Element (SP Edition) does not report the media state or generate preconditions. It only detects whether preconditions are present, and whether all the mandatory preconditions have been met if preconditions exist.
- This feature is a SIP-only feature and is not supported by H.323 or SIP-H.323 interworking.
- With RFC 3312 signaling procedures, media renegotiation is completed only when the mandatory preconditions have been met.

Information about Integration of Resource Management

When the precondition tag appears in the Require or Supported header fields of SIP messages, Cisco Unified Border Element (SP Edition) allows them to pass through. Cisco Unified Border Element (SP Edition) also allows the unmodified SDP to pass through, which represents the state and the preconditions.

When processing an offer results in failure, the underlying SIP message is either rejected or the call is torn down. When processing an answer results in failure, the call is torn down, regardless of the reason for the failure.