



Ia Profile Support

The Ia profile is part of the H.248 functionality that is required for communication on the DBE. The Ia profile is an H.248 profile for the reference point between the Service Policy Decision Function (SPDF) and the DBE (Border Gateway Function (BGF)), also known as the Ia reference point.

The SPDF interacts with the BGF to request services. The Ia reference point is used for communication between the SPDF and a Core Border Gateway Function (C-BGF) and between the SPDF and an Interconnect Border Gateway Function (I-BGF). The H.248 profile defined by ESTI TISPAN for this interface is documented at ETSI ES 283 018.

Feature History for Ia Profile Support

Release	Modification
Release 3.5.1	This feature was introduced on the Cisco XR 12000 Series Router and Cisco CRS-1.
Release 3.6.0	No modification.

Contents

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Information About Ia Profile Support

The Ia profile is an H.248 profile for the reference point between the Service Policy Decision Function (SPDF) and the DBE (Border Gateway Function (BGF)), also known as the Ia reference point. The SPDF interacts with the BGF to request services. The Ia reference point is used for communication between the SPDF and a Core Border Gateway Function (C-BGF) and between the SPDF and an Interconnect Border Gateway Function (I-BGF). The Ia profile name is ETSI_BGF.

The Ia profile supports the control of the following functionality in IP-to-IP Media Gateways:

- opening and closing gates (for example, packets filtering depending on IP address/port)
- allocation and translation of IP addresses and port numbers (NAPT)
- hosted NAT traversal

- packet marking for outgoing traffic
- resource allocation and bandwidth reservation
- policing of incoming traffic
- usage metering

Context attributes

Context Attribute	Supported	Values Supported
Topology	No	N/A
Priority Indicator Yes 0-15	Yes	0-15
Emergency Indicator	Yes	ON/OFF
IEPS Indicator (IEPS is not supported in Cisco CRS-1)	Yes	ON/OFF
Context Attribute Descriptor	No	N/A
ContextIdList Parameter	No	N/A
AND/OR Context Attribute	No	N/A

Termination Names

The Termination ID structure follows the guidelines of the H.248 recommendations and is based on four fields:

```
ip/<group>/<interface>/<id>
```

DBE can accept 3 to 9 fields in a termination id structure, including the Ia profile termination id structure.

Transport

Supported Transports	Ia Profile Requirement	Supported in SBC	Comments
SCTP	Mandatory	No	
UDP	Optional	Yes	
Segmentation - SCTP	Mandatory	No	Inherent to SCTP Transport
Segmentation - UDP	Optional	Yes	

Additional References

The following sections provide references related to Ia profile support.

Related Documents

Related Topic	Document Title
Cisco IOS XR master command reference	Cisco IOS XR Master Commands List
Cisco IOS XR SBC interface configuration commands	<i>Cisco IOS XR Session Border Controller Command Reference</i>
Initial system bootup and configuration information for a router using the Cisco IOS XR Software	<i>Cisco IOS XR Getting Started Guide</i>
Cisco IOS XR command modes	<i>Cisco IOS XR Command Mode Reference</i>

Standards

Standards	Title
No new or modified standards are supported by this feature, and support from existing standards has not been modified by this feature.	—

MIBs

MIBs	MIBs Link
—	To locate and download MIBs using Cisco IOS XR software, use the Cisco MIB Locator found at the following URL and choose a platform under the Cisco Access Products menu: http://cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

Technical Assistance

Description	Link
The Cisco Technical Support website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/techsupport

