



Lawful Intercept Architecture

This document explains Lawful Intercept (LI) architecture, including Cisco Service Independent Intercept architecture and PacketCable Lawful Intercept architecture.

Lawful Intercept

Lawful Intercept is the process by which law enforcement agencies (LEAs) conduct electronic surveillance as authorized by judicial or administrative order. Increasingly, legislation is being adopted and regulations are being enforced that require service providers (SPs) and Internet service providers (ISPs) to implement their networks to explicitly support authorized electronic surveillance. The types of SPs or ISPs that are subject to LI mandates vary greatly from country to country. LI compliance in the United States is specified by the CALEA.

Cisco supports two architectures for LI: PacketCable and Service Independent Intercept. The LI components by themselves do not ensure customer compliance with applicable regulations but rather provide tools that can be used by SPs and ISPs to construct an LI-compliant network.

Cisco Service Independent Intercept Architecture

The *Cisco Service Independent Intercept Architecture Version 3.0* document describes implementation of LI for VoIP networks using the Cisco BTS 10200 Softswitch call agent, version 5.0, in a non-PacketCable network. Packet Cable Event Message specification version 1.5-I01 is used to deliver the call identifying information along with version 2.0 of the Cisco Tap MIB for call content. To view the *Cisco Service Independent Intercept Architecture Version 3.0* document, go to the following URL:

http://www.cisco.com/en/US/technologies/tk583/tk799/technologies_design_guide09186a0080826773.pdf

The *Cisco Service Independent Intercept Architecture Version 2.0* document describes implementation of LI for VoIP networks using the Cisco BTS 10200 Softswitch call agent, versions 4.4 and 4.5, in a non-PacketCable network. Although not a PacketCable network, PacketCable Event Messages Specification version I08 is still used to deliver call identifying information, along with version 1.0 or version 2.0 of the Cisco Tap MIB for call content. The *Cisco Service Independent Intercept Architecture*



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Version 2.0 document adds additional functionality for doing data intercepts by both IP address and session ID, which are both supported in version 2.0 of the Cisco Tap MIB (CISCO-TAP2-MIB). To view the *Cisco Service Independent Intercept Architecture Version 2.0* document, go to the following URL:

http://www.cisco.com/en/US/technologies/tk583/tk799/technologies_design_guide09186a008082682c.pdf

The *Cisco Service Independent Intercept Architecture Version 1.0* document describes implementation of LI for VoIP networks that are using the Cisco BTS 10200 Softswitch call agent, versions 3.5 and 4.1, in a non-PacketCable network. Although not a PacketCable network, PacketCable Event Message Specification version I03 is still used to deliver call identifying information, along with version 1.0 of the Cisco Tap MIB (CISCO-TAP-MIB) for call content. Simple data intercepts by IP address are also discussed. To view the *Cisco Service Independent Intercept Architecture Version 1.0* document, go to the following URL:

http://www.cisco.com/application/pdf/en/us/partner/tech/tk799/c1501/ccmigration_09186a0080826874.pdf

PacketCable Lawful Intercept Architecture

The *PacketCable Lawful Intercept Architecture for BTS Version 5.0* document describes the implementation of LI for VoIP using Cisco BTS 10200 Softswitch call agent, version 5.0, in a PacketCable network that conforms to PacketCable Event Messages Specification version 1.5-I01. To view the *PacketCable Lawful Intercept Architecture for BTS Version 5.0* document, go to the following URL:

http://www.cisco.com/application/pdf/en/us/partner/tech/tk799/c1501/ccmigration_09186a0080826582.pdf

The *PacketCable Lawful Intercept Architecture for BTS Versions 4.4 and 4.5* document describes the implementation of LI for VoIP using Cisco BTS 10200 Softswitch call agent, versions 4.4 and 4.5, in a PacketCable network that conforms to PacketCable Event Messages Specification version I08. To view the *PacketCable Lawful Intercept Architecture for BTS Versions 4.4 and 4.5* document, go to the following URL:

http://www.cisco.com/application/pdf/en/us/partner/tech/tk799/c1501/ccmigration_09186a0080827768.pdf

The *PacketCable Lawful Intercept Architecture for BTS Versions 3.5 and 4.1* document describes the implementation of LI for voice over IP (VoIP) using Cisco Broadband Telephony Softswitch (BTS) 10200 Softswitch call agent, versions 3.5 and 4.1, in a PacketCable network that conforms to PacketCable Event Message Specification version I03. To view the *PacketCable Lawful Intercept Architecture for BTS Versions 3.5 and 4.1* document, go to the following URL:

http://www.cisco.com/application/pdf/en/us/partner/tech/tk799/c1501/ccmigration_09186a0080827794.pdf

Additional Resources

For information about basic support for the intercept of dial access traffic, see the *Lawful Intercept on Cisco AS5000 Series Universal Gateways* feature module at the following URL:

http://www.cisco.com/en/US/products/sw/accesssw/ps511/products_feature_guide09186a00802cafa8.html