iAcuity
Telco

LAWFUL INTERCEPTION SYSTEM (iLIS)

5G-ready fully convergent solution providing unprecedented flexibility ensures lowest TCO for communication service providers.

iAcuity Lawful Interception System (iLIS)

With advancements in communication technology, criminals are getting increasingly sophisticated in planning and executing their crimes. Law Enforcement Agencies (LEAs) need to be a step ahead in tackling crime, by partnering with communication service providers (CPSs). This necessitates communication service providers to implement efficient and convergent solutions for Lawful Interception.

It is mandatory for service providers to have LIS for every network technology offering either Voice, Data, or Multimedia communication services. As the network expands in capacity or evolves in technology, the service provider needs to intercept the services of LEA targets in real-time.

To meet this obligation, service providers need to continuously expand and upgrade their LIS. Service providers look for solutions which are compliant with global standards, easy to operate and maintain, and can handle future technologies and services with minimal effort and cost. iAcuity Telco's iLIS is designed considering these very crucial areas of service providers.

iLIS is a comprehensive and fully ETSI/3GPP compliant Lawful Interception System, which can be implemented at a Communication Service provider's premises at a national level, regional level, or at a specific network technology level, depending on the requirement.

iLIS:

iLIS is a comprehensive and fully ETSI/3GPP compliant Lawful Interception System, which can be implemented at a Communication Service provider's premises at a national level, regional level, or at a specific network technology level, depending on the requirement.

iLIS is responsible for intercepting, recording, and transparently passing the Communication Content (CC) and Call Related/Intercepted Related Information (CR/IRI) for a specific target's circuit-switched traffic and packet switch traffic to the Lawful Interception and Monitoring System (LIM) at the concerned LEA's end in real-time. iLIS transfers the intercepted CC and IRI to LEAs in standard ETSI/3GPP format over a secure network. It also provides a data retention facility for further recording and replay. iLIS is built with a modular architecture which enables integration with future technologies and addresses scalability need.

iLIS's Solution Architecture
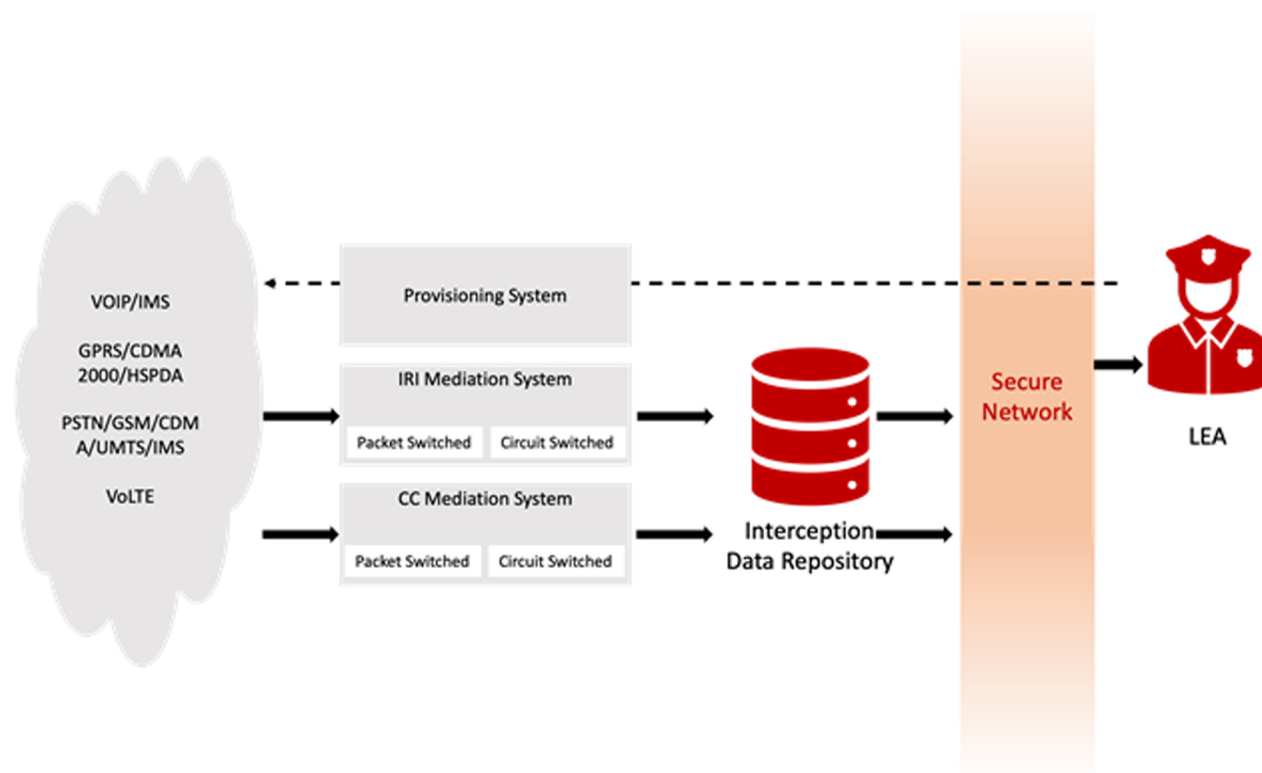
Advantages:

Convergent Solution for a Multitude of Technologies

iLIS provides a convergent solution for a multitude of technologies such as voice calls, video calls, SMS, MMS, FAX, web browsing, etc. It also supports Mobile – 2G/3G/4G/VoLTE, NGN, PSTN, and Broadband networks. This provides a uniform user experience by removing underlying complexities.

Employs Next Generation Architecture Reducing TCO Substantially

iLIS's state-of-the-art architecture renders the capability to scale both in terms of capacity and technology, to bring down the TCO substantially. The modular architecture renders capability to handle new technologies on the same platform by addition of adapters for new interfaces and additional bandwidth required to cater to additional targets for the new services/network nodes.

Interoperability and Co-Existence

iLIS provides incredible flexibility to retain the existing LIS vendor while going ahead with iLIS, for the new nodes being incorporated in a network, the Provisioning Gateway Function module seamlessly exchanges target-related information with existing LIS over secured interfaces.

Complete Visibility of Interception Process

iLIS provides complete visibility of ongoing interceptions, past interceptions, and interception targets by providing relevant information in simple intuitive UI of the intercepted data provider LEAs with crucial, tactical and strategic clues, which can lead to faster and efficient decision making.

Location Update through LBS

iLIS supports integration with other third-party LBS to fetch the target's current location, correlate and pass it on to LEAs.

Components:

Provisioning System:

It is an automated provisioning system that doesn't require any manual intervention. It provides workflow management with role-based access security, reporting and auditing functionalities. It supports interface protocols like Telnet, TCPIP, SSH, XML over HTTPS. It also allows Dynamic Provisioning for moving targets to the network elements.

Provisioning Gateway Function:

It is an optional, integral part of the provisioning system which will enable iLIS to coexist with other LIS already installed in the network. iLIS offers integration in the standard industry format, like FTP/ SFTP, Web Services, and Direct DB Interfaces. Other proprietary interfaces or client-specific interfaces can be done based on customer requests.

IRI Mediation System:

It gathers the Intercept Related Information (IRI) from network elements first and then converts the same to a standard format. The information is then sent to the LIM system over an IP connection. It can also be used as a data repository for future references. The IRI Mediation System is more secure because it has internally separate components for Packet Switched networks and Circuit Switched networks.

CC Mediation System:

It first captures the Content of Call (CC) files from network elements and then converts the same into a standard format. The information is then sent to the LIM system over TDM or an IP connection. It can also be used as a data repository for future references. The CC Mediation System is more secure because it has internally separate components for Packet Switched networks and Circuit Switched networks.

IMS Mediation:

It is dedicated to IMS communication and captures both IRI and CC of all the target calls routed through the IMS, e.g. VoLTE, VoIP, and Multimedia. Supported nodes are SBC (ATCF/ATGW/P-CSCF/SRVCC Combo Node), CSCF (S/I CSCF Combo Node), AS (TAS), MGCF/MGW.

Intercepted Traffic Repository:

It facilitates data storage for future access, data transfer to LEAs, and playback in the future.

INTERCEPTION GATHERING STORING SENDING IT TO LEAS

Salient Features:

✓ Supports interception of all major types of communication traffic on mobile/landline/ISP network for both circuit switched and packet switched traffic-voice calls, VoLTE Calls, data, FAX, SMS, MMS, Emails, web browsing sessions, FTP sessions, VoIP chat, etc.

✓ iLIS's standard configuration is capable of handling 3000 active targets and 480 concurrent voice, 48 videos, 240 packet data interceptions minimum. Other configurations can be done based on requirements.

✓ Provides secure centralized provisioning and administration system while supporting multiple LEAs.

✓ Supports interception in real-time.

✓ Provisioning of same targets for multiple LEAs.

✓ Capable of collection of IRI/CC of the moving targets from multiple sources like SGSNs employing combining mechanisms of those IRIs.

✓ Transferring of IRI both Original IRI Binary and Text Converted (along with feature of decoding of SMS Text) files to the LEAs.

✓ Capable of converting CC data to generate Pcap files and transferring to the LEAs.

✓ Supports Bulk Provisioning Feature where, at a time, bulk targets are provisioned at the network element.

✓ Supports Stealth Mode giving no hint to the target subscriber regarding the interception or causing any disruption to the services.

✓ It provides a data retention facility to store intercepted data.

iAcuity Telco

India
360, Kalyandas Udyog
Bhavan,
Prabhadevi, Mumbai,
Maharashtra 400025

☎ +91-22-2201 6880

✉ info@iacuitytelco.com   🌐 www.iacuitytelco.com