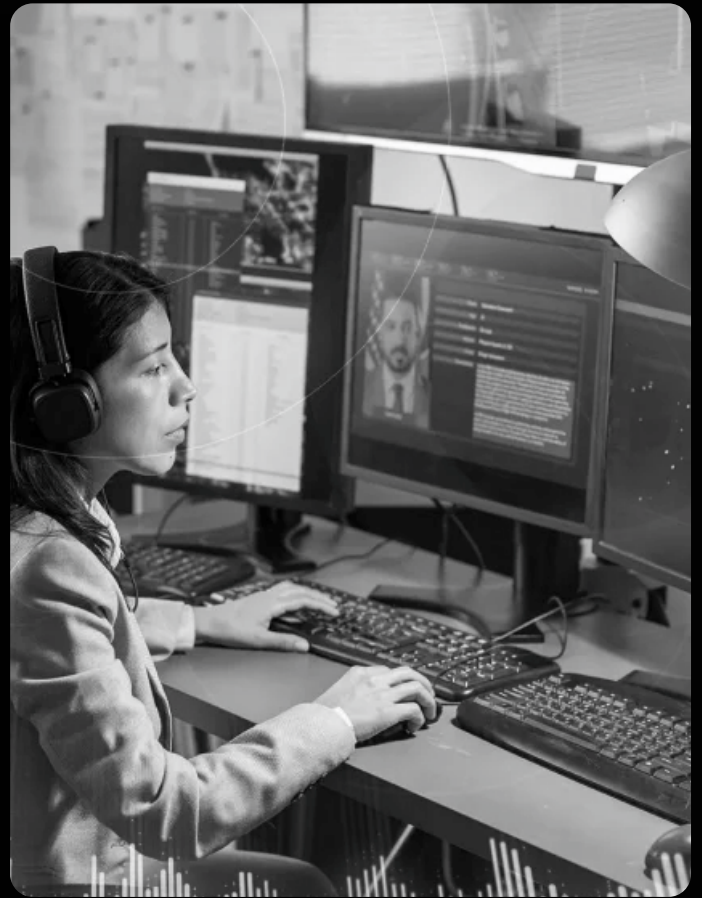


CASE STUDY

RINGCENTRAL EXPANDS ITS LAWFUL INTERCEPTION CAPABILITY WITH PERTSOL'S iINTERCEPTOR PLATFORM



INTRODUCTION

RingCentral, a leading global Unified Communications as a Service (UCaaS) provider, enables enterprises in India to run cloud-based voice communications across distributed teams. The company operates a centralized service delivery and compliance model, governing core systems centrally and extending them as its footprint expands. As part of this rollout, RingCentral scaled its centralized Lawful Interception (LI) framework from one operational site to multiple sites by activating additional interception points. Powered by PertSol's iNterceptor platform, these sites integrated seamlessly into the centralized LI environment, enabling real-time VoIP audio interception within scope, centralized provisioning, high availability, and zero service impact.

CHALLENGES

As the UCaaS provider scaled its regulated voice operations from one operational site to multiple sites, it needed to extend lawful interception coverage without disrupting live services or fragmenting compliance operations.

Key challenges included:

✓ **Scaling LI beyond the initial site while preserving centralized governance**

New interception point had to be brought under the same centralized warrant handling, target provisioning, monitoring, and audit controls – without creating site-by-site operational silos.

✓ **Non-ETSI-compliant SBC constraints at new sites**

With SBC interfaces not designed for ETSI-aligned active LI, the provider required a fully passive, probe-based interception approach.

✓ **VoIP audio-only interception**

The interception scope required accurate, real-time capture and delivery of VoIP audio, demanding precise scope control and protocol-aware processing.

✓ **Reliable interception from mirrored high-throughput traffic**

The solution had to accurately intercept VoIP from mirrored 10G traffic filtered via the Big Switch platform, ensuring no packet loss and no impact on subscriber experience.

✓ **ETSI-aligned handover outputs for LEA delivery**

The deployment had to generate & deliver IRI & Call Content (CC) in ETSI HI2/HI3-aligned formats for secure delivery to authorized LEAs.

✓ **High availability and resiliency**

Because LI is a mission-critical compliance system, each interception point required redundancy to eliminate single points of failure and maintain uninterrupted operations.

WHY THEY CHOOSE PERTSOL

RingCentral selected PertSol to support a multi-site expansion of its lawful interception capability while preserving centralized control and service continuity. PertSol's iNterceptor platform aligned with the provider's DoT and TEC-GR compliance obligations and enabled ETSI HI2/HI3-aligned interception outputs for lawful handover. Operationally, PertSol delivered a probe-based, passive interception approach well-suited for UCaaS environments – reducing risk to live services and avoiding intrusive changes to production network elements. Combined with PertSol's deployment experience and responsive support, the provider gained confidence in rapid site activation, consistent compliance enforcement across sites, and stable day-to-day operations.

SOLUTION

PertSol implemented a centralized, multi-site LI expansion using a probe-based, passive interception model – aligned with DoT/TEC-GR requirements and designed to produce ETSI HI2/HI3-aligned outputs for authorized LEA handover.

KEY ELEMENTS OF THE IMPLEMENTATION INCLUDED:

- ✓ Deployed **iNteliProbe** at the new interception point(s) to capture **mirrored VoIP traffic (10G)** filtered via the **Big Switch platform**.
- ✓ Integrated each interception point with the centralized **iNterceptor Management System (MS)** and **Mediator** to enable **centralized warrant handling, target provisioning, monitoring, and audit control**.
- ✓ Configured the solution to generate **IRI** from captured SIP signaling and reconstruct **Call Content (CC)** from RTP/RTCP streams to support real-time VoIP audio interception.
- ✓ Enabled secure local handover mechanisms for delivery of **IRI and CC** to authorized agencies in the required format and workflow.
- ✓ Implemented **high availability** through redundancy at the interception point to eliminate single points of failure and ensure continuous 24x7 compliance operations.

- ✓ Ensured protocol support aligned to the environment, including **SIP, SIP-TLS, RTP, SRTP, multiplexed streams, and RTP header compression.**

RESULTS

- ✓ Scaled lawful interception from **one site to multiple operational sites** using a consistent rollout blueprint.
- ✓ Activated new interception points with **production traffic uninterrupted** and **no customer-impact incidents reported during rollout.**
- ✓ Delivered **real-time VoIP audio** interception outputs from mirrored high-throughput streams with stable performance in live conditions.
- ✓ Reduced operational risk through **site-level redundancy**, improving continuity for 24x7 compliance operations.
- ✓ Improved rollout efficiency for subsequent site activations by standardizing configuration, provisioning, and handover steps.

KEY HIGHLIGHTS

Problem	Solution	Impact
Scale LI from one site to multiple sites	Multi-site rollout using iNterceptor	Expansion achieved without reworking the core LI setup
Extend LI without impacting live services	Passive, probe-based interception from mirrored traffic	Service continuity maintained during site activations
Need consistent centralized control across sites	Central MS & Mediator integration	Unified provisioning, monitoring, and audit readiness
Real-time VoIP audio interception required	SIP-based IRI + RTP/SRTP audio reconstruction	Accurate, real-time VoIP audio outcomes
Standards-compliant handover outputs required	ETSI HI2/HI3-aligned outputs aligned to DoT/TEC-GR	Compliance-ready delivery to authorized agencies
24x7 operational continuity needed	Site-level redundancy	Improved resilience and reduced downtime risk

“Modern communication networks demand compliance that scales as seamlessly as the services they support. Lawful interception enables secure, consistent, and uninterrupted cooperation with authorized agencies.”