NICE® ∎ Intent. Insight. Impact.™

Active VoIP Recording

For Cisco Unified Communications Manager

NICE provides VoIP-based recording solutions for contact centers and enterprises, as well as for trading floors and the back offices of financial institutions. NICE VoIP recording solutions support active recording with the Cisco Unified Communications Manager.

IP Phone based Active VoIP Recording

NICE active VoIP recording enables the delivery of centralized recording capabilities in distributed environments. All NICE Perform servers are consolidated in the data center, where all calls that take place in the organization's branches and other remote locations are recorded.

By reducing the need for costly branch set-up, administration, and management of recording servers, NICE helps to flatten the organization and enables simple yet efficient handling of remote employees.

This IT-friendly technology makes active VoIP recording the ideal solution even for single site operations.

NICE's solution for IP-phone based active recording for Cisco Unified Communications Manager (CUCM) is another component of NICE's extensive portfolio of active recording integrations.

Solution Benefits

Consolidation

NICE active recording for Cisco enables the centralization of the recording system in the datacenter, in a similar manner to the centralization of the CUCM servers. This allows the organization to benefit from reduced expenses and to enjoy both economies of scale and the lower support costs, thanks to simplified and consolidated administration, management, and maintenance.

IT Friendliness

Passive VoIP recording requires the use of mirroring ("SPAN") sessions. These sessions have to be maintained for supporting moves, adds and changes of the telephony and data networks. This may conflict with organizations' IT policies. **IP-phone based active recording** does away with the need for mirroring sessions, thus reducing the network management load on IT staff.

Lower Total Cost of Ownership

NICE offers a reduced footprint, industry standard servers, the highest number of recording channels per server, and advanced compression capabilities that reduce long-term storage volume and ensure lower ownership costs.

Freedom from Size Limitations

The NICE integrated recording solution meets the recording needs of all sizes and kinds of business, from small enterprises recording a few dozen phones to large single-site and multi-site operations with tens of thousands of phones.

Cohesive, Integrated Solution Suite

NICE meets all the organization's call recording requirements. The same system can support all recording modes – Total Recording, user initiated Recording-on-Demand, and rule-based recording, including sampled recording for Quality Management in contact center environments.

NICE offers a unified solution for recording in mixed telephony environments, specifically where CUCM is serving the back office of a financial trading floor while a turret system is being utilized in its front office.

Improved Operational Control

NICE offers organizations better control by means of centralized administration, recording and playback. All the operational and administrative activities can be performed over the network.

High Security

Extensive privilege-based user access mechanisms provide full control of user operations, while an integral audit trail provides detailed information of user activity.

Unlimited Storage

In addition to off-line storage capabilities, NICE's integration with leading enterprise storage management vendors enables centralized archiving with seamless on-line media access.

Theory of Operation

NICE Perform Architecture

The NICE Perform solution is composed of four main elements:

- Interactions Center
- Loggers
- Database
- Application Server

The **Interactions Center** connects to the CUCM CTIManager using TAPI (or to the Cisco Unified Contact Center Enterprise CTI Gateway in contact center environments) for receiving call events. It implements recording rules, handles recording requests and controls the loggers.

The **VoIP loggers** capture and record the voice packets. The Database maintains the call details and the system's administrative information.

The **Application Server** provides access layer for the system to the end user applications. The system's elements may be consolidated in a single server or a pair of servers, or distributed among several servers, according to the scale of the solution.

Additional optional elements include screen loggers for recording the screen activity of the users, a Storage Center for managing long-term storage of the recorded data, and speech analytic servers for automated voice analysis.

Contact centers can take advantage of the advanced NICE SmartCenter Suite. NICE SmartCenter provides organizations with capabilities to improve performance at the agent, operational and enterprise levels. It drives contact center and enterprise performance by leveraging the synergies of the combined capabilities of NICE's offering for interactions capture, quality management, interaction analytics, workforce management, performance management, coaching, and customer feedback.

Phone-Based Active VoIP Recording

Cisco IP-phones are capable of forking the received and transmitted voice traffic in two separate Real Time Protocol (RTP) streams. NICE Perform uses SIP trunk in order to connect to the CUCM cluster. Over this SIP trunk the CUCM and the NICE Interactions Center exchange SIP messages which direct the recorded calls from the IP-phones to their destination – the VoIP logger.

Recording Modes

The NICE-Cisco phone-based active recording integration supports the following recording modes:

- Total Recording
- Interaction-based Recording, including Record on Demand or Quality Management recording programs.

Total recording is used where all the calls need to be recorded. The recording session automatically establishes when an agent answers or initiates a call.

Interaction-based recording serves for recording specific calls. NICE Perform invokes the recording session for an active call through the CUCM CTIManager using TAPI. The trigger for recording calls in interaction-based recording may be a human recording request or a recording rule, based on the call's details.

The setting of the recording mode is based on directory numbers (DNs), and mixed recording modes are supported within the same system for different DNs. The recording capability is a CUCM administered feature. The phone's DN is configured as "Automatic recording" for Total Recording or as "Application-invoked recording" for Interaction-based Recording in the CUCM administration.

Recording Transparency and Tones

Even though the IP-phone actively participates in the recording process by sending out the audio streams, the recorded user does not receive any visual or audio indication that recording is taking place.

Note that in certain jurisdictions, a requirement exists to inform the calling or the called party by means of a specific tone that their call is being recorded. The IP-phone is capable of inserting this notification tone, ensuring that the called or the calling party (or both) is notified that recording is taking place.
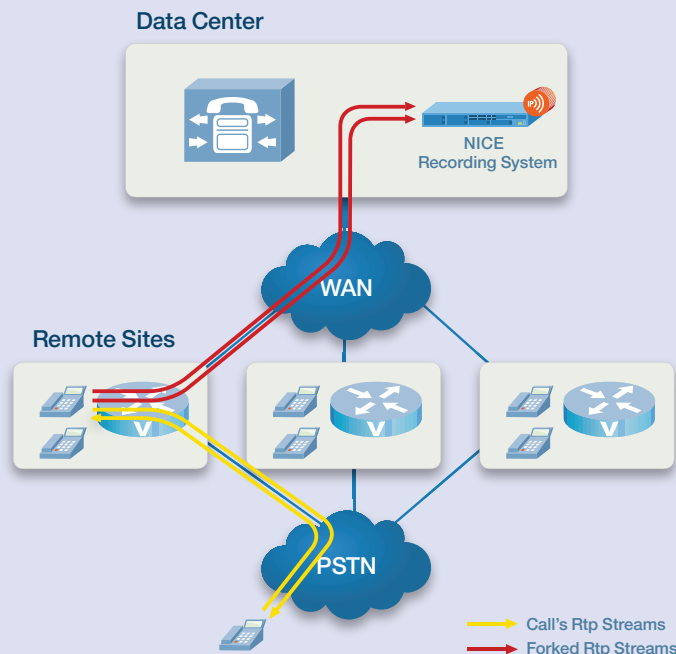
Supported Versions and Phone Models

For an updated list of supported CUCM versions and phone models please consult the NICE Integration Description Document (IDD).

The **VoIP Recording Agent** is software that runs on a PC, capable of forking the RTP packets of a Cisco IP Communicator softphone or of a daisy-chained hard IP-phone. The VoIP Recording Agent then sends the forked streams to the VoIP logger, in a similar manner as the phone-based active recording.

NICE Perform software migration paths are available once the CUCM system and phones are upgraded to support phone-based active recording. Where only a portion of the phones are of the models that support phone-based active recording, the rest of the phones can be recorded using any of the other above-mentioned methods. NICE Perform supports mixed recording methods in the same system.

IP Phone Based Active Recording: RTP Streams Flow

Data Center

NICE Recording System

WAN

Remote Sites

PSTN

→ Call's Rtp Streams
→ Forked Rtp Streams

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ABOUT NICE

NICE Systems (NASDAQ: NICE), is the worldwide leader of intent-based solutions that capture and analyze interactions and transactions, realize intent, and extract and leverage insights to deliver impact in real time.

Driven by cross-channel and multi-sensor analytics, NICE solutions enable organizations to improve business performance, increase operational efficiency, prevent financial crime, ensure compliance, and enhance safety and security.

NICE serves over 25,000 organizations in the enterprise and security sectors, representing a variety of sizes and industries in more than 150 countries, and including over 80 of the Fortune 100 companies. www.nice.com.

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