



CISCO RECORDING SOLUTIONS

CYBERTECH RECORDING SOLUTIONS

CyberTech Recording Solutions are the industry's first open and secure recording solutions; designed using industry standards. This industry leading technology is being used by the worlds leading financial institutions, governmental and public safety organizations and contacts centers. By leveraging commercial off the shelf hardware and customer provided network storage devices, this future-proofed solution for the capture, storage, retrieval and playback of voice, radio and data communications provides unsurpassed functionality and reduces a firms total cost of ownership.

This flexible, multi-media product delivers high quality recordings for traditional or VoIP telephony, data and desktop screen for all applications including verification and compliance, dispute resolution, training and quality monitoring.

CISCO RECORDING METHODS

CyberTech delivers several Cisco VoIP recording solutions. Each solution is highly reliable, easy to install and economical in use. Each solution uniquely enables organisations to achieve the highest levels of flexibility, quality assurance and liability protection while supporting existing hardware and infrastructure.

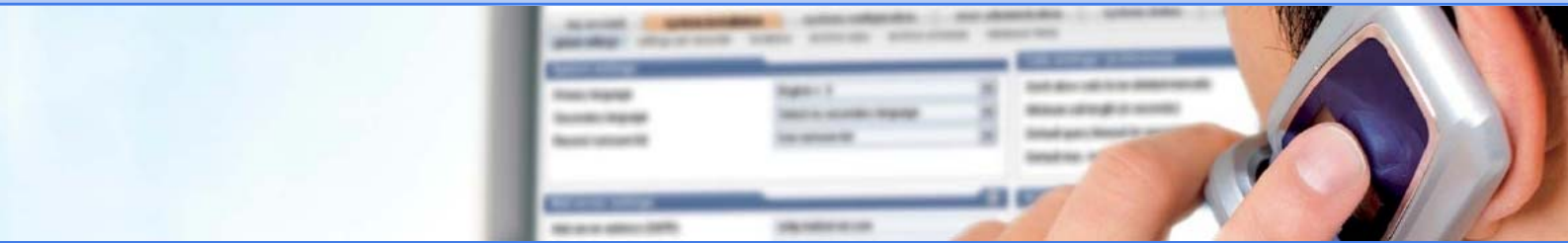


CyberTech offers 4 recording methods for Cisco:

1. IP-based Passive IP Recording: IP recording using the SPAN port of the network switches.
2. Extension-based Passive Recording: a specific case of Passive IP Recording based on a list of extensions to be recorded. It supports Extension Mobility and is non dependant on phone IP/MAC addresses for recording.
3. Selective Gateway Recording: IP recording based on spanning the audio from one or more gateways and receiving the related call information from the Cisco Call Manager.
4. Active IP Recording: Case of IP recording using a Call Manager integration and the dual media stream facility. A CTI integration with target monitoring is used to trigger the recordings.

The choice of recording methods depends on the requirements for cost effectiveness, resilience and expansions possibilities.

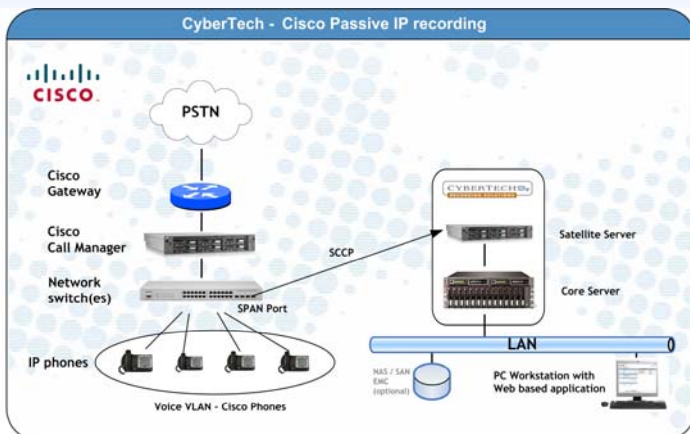




PASSIVE IP RECORDING

Passive Recording uses a SPAN port of the network switches and IP phones that are put in a voice VLAN. The Call data (like phone display events) is captured by the SPAN port, so no CTI or CDR integrations are required. Optional monitoring licenses are possible, and both Recording of G711 (standard - 64Kbit/s) or G729 (optional - 8 Kbit/s) SCCP protocols are supported. This solutions is approved by Cisco.

Calls to be recorded are duplicated from the extension and streamed via a SIP trunk actively terminated at the recording system. Call details are read from the JTAPI interface (the Cisco Call Manager CTI connection). The JTAPI connection is used for the Cisco selective recording facility (from Call Manager version 6.x) and the duplicated audio stream sessions are initiated by the Cisco Phone. Encrypted calls can also be recorded (Encryption from Cisco is available from Call Manager version 8.0).



With standard passive IP recording, the IP or MAC addresses are used to determine which phones need to be recorded. Alternatively, it is also possible to use a 'white list' of phone extensions to determine which extension numbers need to be recorded. This Extension-Based Passive Recording can be used for standalone recording systems (< 240 recording channels).

ACTIVE IP RECORDING

With Active IP recording, calls to be recorded are duplicated from the extension and streamed via a SIP trunk actively terminated at the recording system.

GATEWAY RECORDING

With the Cisco Gateway Recording solution the Cisco Gateway and the Cisco Call Manager are both used to gather information on the recorded calls. From the Cisco Gateway the audio calls are recorded. Data for all recorded phones is received from the Cisco Call Manager. The major benefit of the Cisco Gateway Recording solution is the efficiency: the number of VoIP recording channels required is exactly the number of extensions to be recorded. This is usually less than the total number of Gateway channels.

