# **Voice Management**

# **Call Monitoring and Recording**

The Atea Call Recording application will record telephone conversations in a Cisco IP telephony environment. The Call Recording application operates as a full time recorder (recording all calls on all participating phones), and/or as an ad hoc recorder, where the users activate the recording sessions by pressing a key on their phones or as a Silent Monitor and Record system. The recorder will record internal, external, multicast/radio and conference calls and place them all on a central server or san. Atea Call Recording is available for both Cisco UCM (CUCM) and Cisco UCM Express (CUCME) and easily fits into an enterprises server, OS and network environment.

The key strengths of the Atea recording solution is it's flexibility to fit any network architecture, and the open systems/non proprietary approach of the whole solution.

#### How can I use it?

**Compliance:** Ensure all your legal requirements are met with fully archived and searchable voice recordings.

**Call Agent Quality Control:** Call centre supervisors can silently listen in to calls the agents are on (optionally recording the call), and provide training and guidance to the agent after the call has ended.

**Transaction Verification:** Call recording provides a record of the call that can be used to verify verbal agreements and instructions especially in financial and legal environments. **Investigation:** Call recordings can be used to track and investigate activities of internal and external parties, including abusive or inappropriate calls.

**Emergency Situation Logging:** Fire and Police are now using Lan Mobile Radio gateway (LMR) solutions and require logging of incidents and ongoing emergencies for review and training purposes.

### **Recording Architecture:**

The system is controlled by a central recording server. This server application runs on the customers preferred hardware platform and operating system.

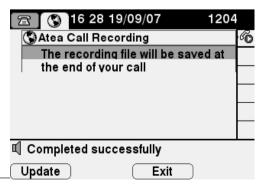
**Call Control Integration:** The system integrates into the call control using either of two methods. The first is by analysing the packets directly from the LAN going to and from the CUCM. This method is highly scalable and has no load impact on the CUCM making it the method of choice to most customers. However, it does require the server to be connected to the same segment as CUCM which may have network implications. The second uses the JTAPI interface from the CUCM and watches for interesting phones/users.. This method is more mainstream but does have an impact on CUCM load so needs to be accounted for in the planning stages of deployment.



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## **Call Recording features:**

- Architecture to ensure compliance recording is implemented enterprise wide
- Records Internal, External and Conference calls
- Records MultiCast calls from Lan Mobile Radio gateway (LMR)
- IGMP support for Multicast
- Operates in full-time or ad-hoc mode
- Optional silent Monitoring and Record feature
- Supports both Cisco UCM and UCM Express
- Beeps and Audio files can be inserted into conversation
- Recorded files in industry-standard AU format, supported by all common media players
- Simple access to recording files via a Windows share folder
- Web interface for file search and replay.
- All recordings have tamper detection
- User can elect to save the recording of the current or last call
- User can associate a matter or account code with a recording
- Multiple concurrent recording techniques allows flexibility in network design
- JTAPI or Protocol analysis recording initiation
- User, Operations and Network
- Utilises the Atea TSP architecture



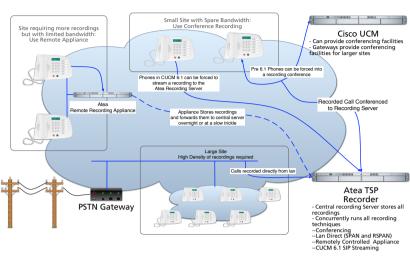
# **Recording Techniques**

account code to the recording, which will be added to the recording files filename.

To ensure the customer is able to use best practices in network design, Atea has implemented a range of recording techniques

which can be used concurrently to provide the best solution for any location.

- LAN Direct. This
technique pulls the selected
call traffic directly from the
LAN by using SPAN or
RSPAN across switches. This
technique ensures high
volume locations can be
recorded with the minimum
of network disturbance and
ensures high performance.



small number of calls are being recorded.

- Remote Appliance. For those sites where there is a larger number of recordings required, and bandwidth is at a premium a remotely controlled appliance can be used. This device collects call recordings onto it's hard disk and/or a local Windows share. The recording can then be sent to the central site archive either as a drip feed throughout the day or

- Conferencing. The

Recording Server forces a (silent) conference onto a selected users call, and directs the conferenced leg to the recording server. This technique works well where there is enough bandwidth to cover the recorded legs going to the central server and where only a

overnight.

- **CUCM 6.1 SIP Forking.** In CUCM 6.1 there is the capability of commanding the IP phones to generate a duplicate call stream to a recording server. This is a much more scalable conferencing type facility that doesn't require external conferencing bridges.

# **Recording Initiation**

The recordings can be initiated in many ways. Every user can be set up to have a different method of starting a recording.

- Full Time Recording. The most simple is Full Time Recording

(FTR). A phone/user is designated to have all its conversations recorded. In this case all of the call is recorded and archived. A message is displayed on the users phone stating "Recording in Progress".

- Full Time Recording on Demand. A user can be set up to have all calls recorded but is then given the option of saving the call once complete. A message on the phones asks "Save Call Recording? Yes or No" at which point Business Banking

Location 2

Location 1

Auto Start:
Auto Start:
Auto in a watched multicast group in generating error at any time

Full Time Record on Demand:
Save Call?
Yes or No

Auto Start:
Auto in a watched multicast group in generating error at any time

Atea TSP & Recorder

- BB M&R
- BB FTRAD
- SD FTR
(instances of the recorder to allow for different recording profiles etc)

BB M&R = Business Banking Monitor and Record BB FTRoD = Business Banking Full Time Record on Demand SD FTR = Service Desk Full Time Record

the recording will be archived or deleted. The same thing can be achieved by pressing the "Record" button on the phone during a call. Users can use their phones' keypad to assign a matter or

- **Monitor and Record.** A supervisor can be set up to silently monitor a range of phones. During the monitoring the supervisor

can choose to start a recording on the monitored conversation.

- Ad-Hoc Recording. A user can initiate a recording using a recording button on the phone. The call from this button push until the end of the call or another button push is captured. Users can use their phones' keypad to assign a matter or account code to the recording, which will be added to the recording file's filename.
- Auto Start. This special technique is used with the Cisco Lan Mobile Radio

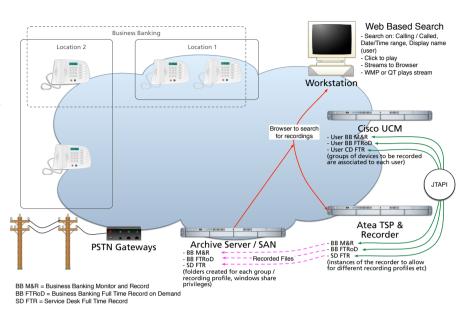
gateway (LMR) solution. The recorder listens (on the LAN) for audio within a specified multi-cast group or unicast connection. Once audio starts, the recorder captures all the requested radio traffic until the audio stops. The recorder stops recording a configurable

period after audio stops to allow for pauses in the audio stream. Multiple streams can be recorded concurrently.

#### Storage and Review

existing security infrastructure. The files are indexed from a database which allows for searching and online listening of calls for authorised users.

The recordings are all saved as separate files.
Each file is named with:
Called #, Calling #, date and time of call start and matter or account code (if added). Files are stored to a secure windows share environment fitting in with the organisations



# Atea Telephony Services Platform (TSP) and other supported applications:

The Atea TSP is a flexible applications platform designed especially for the telephony environment. It allows Atea to write applications fast, and the customers to enjoy a single server architecture capable of running a number of different applications to enhance the value of an IP telephony network. These applications include:

**Billing and Reporting:** Provides user and departmental billing for reallocation or cross charging of telephone expenses as well as a range of operational reports (including Gateway Utilisation, Incoming and Outgoing Call Analysis) to help plan and manage a Call Manager or Call Manager Express voice network.

**Contained Front End:** The Atea CFE application allows a tightly controlled set of tasks to be assigned to groups of users that you normally wouldn't provide Call Manager supervisory access to. By providing very granular control of the activities assigned through a web based front end, simple tasks can be taken from highly paid technicians and given to local staff.

**Drag'n'Drop Dialer:** Allows a user to select any number string in any desktop application, drag it to the dialer box on the task bar, and the IP phone will dial the number. Can also let users enable web pages to provide click to dial functionality.

**Phone Messenger/Pager:** Enables messages and pages to be sent to IP phone screens, individually or as groups. Messages or files are sent via a security enable web page. Pages are sent directly from authorised phones.

**Dial Alert:** This function allows a set of keystrokes to be assigned on any group of IP phones to raise an alarm for that location. Messages can be sent to other phones or monitors with the location of the alarm.

**Call Forward Editor:** This application provides additional functionality to allow users to edit the call forward functionality of any of their phone lines from their IP phone.

**Speed Dial Editor:** This application allows a user to setup and manage the speeds dials on an IP phone without having to log into a web page.

**Personal Contacts Manager:** This application allows a user to setup and manage a private contacts list on their IP phone without having to log into a web page.

**Team View:** This application allows a user to see the phone status (on hook / off hook) of a group of IP phone users from the screen of their IP phone.

**Advanced System Speed Dial:** This application provides private, group or corporate speed dial lists (up to 1000 entries). Lists can be assigned to groups of users, and are administered centrally.

## **Simultaneous Login Service**

The Atea Simultaneous Login Service (SLS) provides users with a single seamless login of their phone and workstation anywhere within an organisation. Utilising the Atea Telephony Services Platform (TSP), the SLS application interacts with the user workstation, Active Directories and Cisco Unified Communications Manager to understand phone / workstation relationships and use that information to log a users phone in once their workstation login has been authorised.