Avtec® IP Dispatch Console Voice Recording

VPI CAPTURE™

Avtec Scout Console Release 3.4
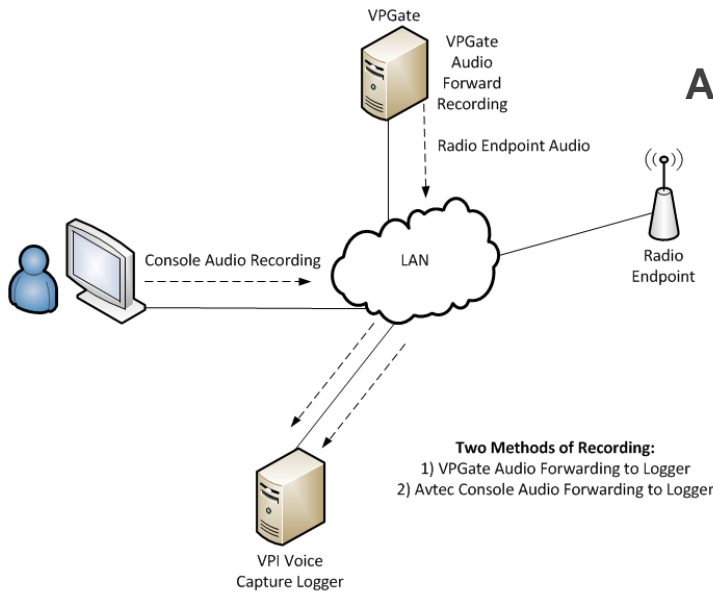

Software-only IP Voice Recording via RTP and Audio-Forwarding on Avtec VPGate

G.711 and G.729 Codecs Supported UDP Protocol

No need for SPAN Audio Packet Capture

Does not require managed switches on a network

Records both Tx and Rx Channels

Through collaboration with Avtec, VPI is certified to record voice interactions from endpoints through VPGate or recording directly from the Avtec Scout Console using VoIP. This brings the same powerful information that comes from analyzing your landline interactions to your radio interactions. The combined solution delivers affordable, reliable technology to dispatch communications centers of all sizes. **VPI CAPTURE**, a Next Generation 9-1-1 ready solution, leverages open architecture and is platform independent to integrate seamlessly into your existing and evolving infrastructure. Organizations that employ Avtec Scout Dispatch Console systems can now more effectively leverage audio recording to capture, evaluate, analyze and improve interactions.

Advanced Direct Recording of Radio and Telephone Transmissions

VPI, a dedicated Avtec Partner, has integrated its robust, award-winning **VPI CAPTURE** VoIP recording technology with Avtec Scout systems for streamlined, software-only recording. Avtec VPGate forwards the incoming and outgoing audio transmission and associated data to both, the **VPI CAPTURE** recorder and Scout Console simultaneously.

All Scout audio resources (Radio base stations, Talk Groups, Telephony circuits) are managed on an IP basis by Avtec's VPGate software gateway. Whenever audio is active, VPGate uses RTP and audio forwarding to send packets to the Avtec Scout Consoles and simultaneously to the VPI Capture recorder. Related metadata is forwarded as well. This direct recording integration always results in capture of the entire voice transmission – the recording starts at the beginning of the voice transmission and is automatically terminated when the transmission ends. For search and playback purposes, recorded calls can be found by any combination of captured metadata, to include console, channel name, channel number, console ID for the console recording the data, the user login name, the endpoint name, the endpoint type, start, date, time and call duration information, Frequency, ANI or Caller ID, Talk group, call type emergency state and Audio Direction.

Example Data Flow

Data for an incoming conventional radio transmission flows is as follows:

1. The base station receives a radio transmission.
2. The radio is connected (analog) to the Avtec Outpost.
3. The Outpost converts the analog radio traffic to IP and sends it to VPGate.
4. VPGate then sends the IP packet with the radio transmission to the Scout Console. When configured for recording, it will also be simultaneously sent to the **VPI CAPTURE** recorder.

Solution Advantages

Little or No Impact on Network Resources
With a direct IP connection to the Scout console system, **VPI CAPTURE** records superior audio quality and simplifies network design without needing to identify tap points that other indirect-capture solutions require.

Faster Implementation, Less Hardware
VPI's recording method captures transmission streams via certified direct integration, eliminating the need for spanning ports or managed switches. This efficient integration approach saves hardware resources on both, VPI and customer sides and expedites implementation.

Support for Advanced Radio Technologies
The Avtec VPGate transcodes audio from IMBE™ and AMBE+2™ formats to G.711 (and can also perform decryption) before forwarding to the recorder. These are the native vocoder formats for P25, DMR, and pDMR radios.

Open, Standardized File Formats
The application supports the standard codec implementations G.729 and G.711. Both G.711 and G.729 can be used simultaneously - there is no setup needed within **VPI CAPTURE** to allow for this. The customer sets up the codec type within their Avtec VPGate software directly, transparently to the recording process. All resulting audio files are stored in a standard, Microsoft-native .wav format, with 13.3 kps GSM compression.

Customer Requirements

- VPGate Version 1.3.x or above. Avtec recommends that a customer upgrades to the latest current version of Avtec VPGate at the time of implementation of **VPI CAPTURE**.
- VPGate configured with an Audio Forwarding Driver for each endpoint to be recorded.
- Expanded metadata (console ID for the console recording the data, the user login name, the endpoint name, and the endpoint type) is available with Scout version 3.4
- VPI VPortal Version – 5.4 sp 2or above
- VPI Voice Version – 4.6.1.75or above

Each **VPI CAPTURE** server can scale to support up to 384 endpoints. Additional recording channel capacity is easily achieved by multi-server networked solution. Final recording capacity can be scaled to thousands of channels. As additional recording servers are added to the environment to support a growing endpoint count, it may become necessary to add an additional server for V-Portal support. V-Portal is the centralized Web-based application server that allows end users to seamlessly search and playback calls from any recording server from a single UI. As more users simultaneously search and playback recorded interactions, the performance of the centralized V-Portal server may be impacted, thus VPI recommends separating out the database from the application servers and placing these components on separate servers.

About VPI

VPI (Voice Print International, Inc.), an Avtec technology partner, is the premier provider of integrated communications recording and quality assurance solutions for public safety, transportation, utility, government and enterprise organizations. VPI's award-winning solutions help more than organizations worldwide optimize workforce performance, improve customer experience and ensure compliance. For more information, visit **www.VPI-corp.com** or **call (800) 200-5430.**