VoiceCollect®

Voice Recording System VC-MDX

VDS-II
VoIP Recording

Version 1908

1 General

The Software Module VDS-II is a development of VoiceCollect GmbH (former ATIS Uher).

The VDS-II belongs to the VoiceCollect® product family and It is used as a powerful VoIP Middleware which covers Standard Protocols and is able to integrate smooth and seamless into proprietary VoIP Communication Systems.

VDS-II receives and processes VoIP communication and forwards content and call related data & events to the recording system VC-MDx

VDS-II can be installed, depending on the number of concurrent recording sessions, as a virtual input board on a VC-MDx Server or run on a separate server hardware
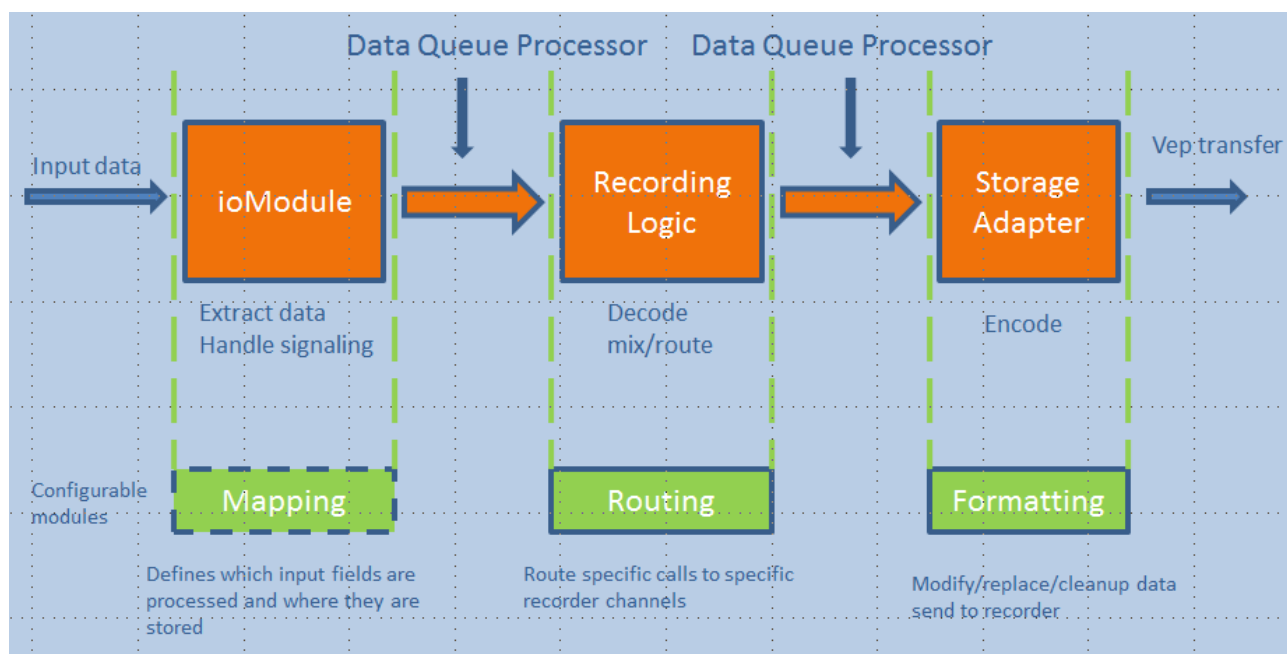
2 Interface

The hardware interface for VoIP recording is a COTS Ethernet Interface. This interface is a dedicated 1 GB interface for VoIP recording and compliant according to IEEE 802.3., The VoIP sources are directly connected to the VoIP recording dedicated Ethernet Interface of the VC-MDx.

The ability to record VoIP communication with VC-MDx is based on VoIP licences.

2.1. VoIP Recording ED137

- Recording according to ED137 B part 4 standard for the use of VoIP communication in Civil Aviation.
- Active connection to the recoding system by other ED 137-enabled components like radio transmitters or voice communication systems (VCS) for single or redundant voice recording.
- Static Routing Function to allocate communication sources to recording channels.
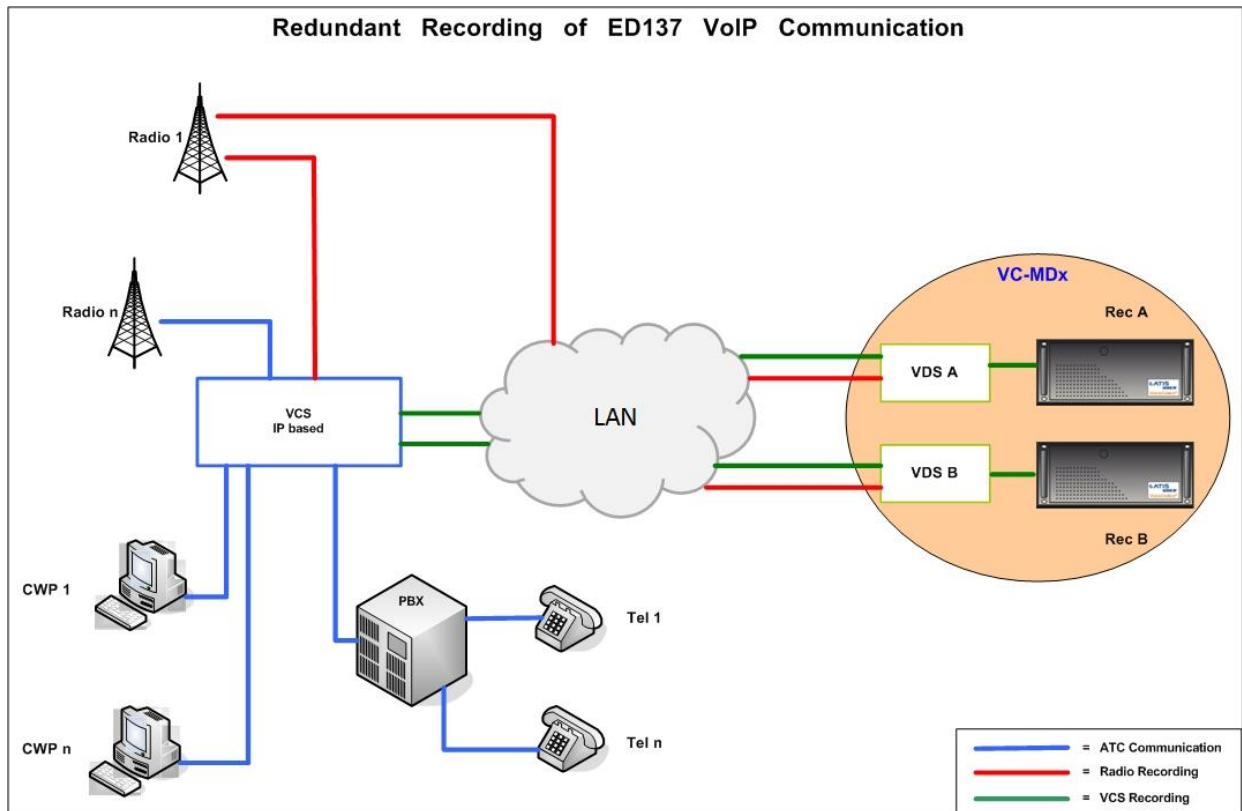- Storage and visualisation of events like PTT, Squelch or STD.

The solution for the legal recording of ED137 based communication is based on the VoIP Decoding System VDS-II and is usully combine dwith the recording system VC-MDx. VDS-II acts as the receiver towards VCS, CWP and radios.

The used VoIP protocol is according to Eurocae ED137 part 4 VoIP protocol. The protocol is designed for secure and reliable VoIP communication and recording in ATC and ATM environment. The protocol was designed by a Eurocae working group. VoiceCollect (former ATIS UHER) took part in this working group and we successfully tested our ED137 implementation at the ETSI organized plug test.

Redundant recording is already implemented in the ED137 protocol, ED137 compatible radios or VCS working positions sent two independent VoIP streams to the recording equipment. The recorded communications and additional data (CRD) are transmitted to the VC-MDx which stores the recordings, controls the archiving process and presents them for evaluation & playback.

Besides other radio types the solution is fully functional of VoIP recording with Radio PAE T6 Series and PAE M7 (T6R Receiver, T6T Transmitter, T6TR Transceiver, M7 Transceiver)

Operation	VDS-II receives communication from VCS, CWP, and Radios, -gateways via LAN Single or Redundant recording
Supported Standards	ED137B p.4
Supported Codecs	G.711
Supported call scenarios	Radio recording with mixed Rx/Tx Telephone recording Intercom recording
Miscellaneous	Static channel routing Dynamic channel routing Redundancy concepts

VoiceCollect®

Redundant Recording of ED137 VoIP Communication

Display of CRD and Events according to ED137b

VoiceCollect®

2.2. VDS-II SIP

- Recording according to SIP standard, available for passive or active connection.
- Supports registration at SIP Registrar or SIP Proxy (SIP Active).
- Supports SIP over UDP and SIP over TCP. Static Routing Function to allocate communication sources to recording channels

2.3. VDS-II RTP

- Recording according to RTP standard, available for passive or active connection.
- Optional with VOX control. Supports Multicast registration (RTP Active).
- Supported Codecs: G.711, G.723, G.726, G.728, G.729, GSM, iLBC and TETRA

2.4. Others Proprietary VoIP protocols

- Alcatel
- Thales
- Siemens
- Unify
- Motorola
- Cisco
- Infocert NF399

*** End of Document***