

Version 1.0



Voice Logging System

Customized Document on Avaya IP Office.

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1. OVERVIEW

SpeechLogix is a leading provider of Voice Logging and Recording Systems in South Asia and the Middle East. Its flagship product DGVox is designed to record and archive voice communications, be it Telephone calls (IP, Digital or Analog), Radio communication or even Radar data. DGVox with its powerful web based user interface allows users to monitor, search and evaluate calls and generate various types of reports and graph for analysis.



DGVox Passive IP Recording (Using SPAN/ Port mirroring)

DGVox Passive VoIP call recording– Passively "sniffs" audio streams along the IP path using mirroring (SPAN) capabilities of local area network switches and dependent on IP/MAC addresses for recording. Available with every telephony environment that uses standard Real-time Transport Protocol (RTP).

Signaling protocol data passes from originator to PBX to destination. Media files travels direct from originator to destination, bypassing PBX. Therefore, interception has to happen at a level that acquires both signaling and media. Complex environments (multiple cascaded switches) need study to determine appropriate tap point.

DGVox voice recording solution is integrated with the Avaya IP office platform. The below note describes the configuration, prerequisites and supported IP office platforms for the interoperability of DGVox with Avaya IP office

2. DGVox on AVAYA IP OFFICE

For Avaya customers that require more call signaling data and events than what is available with SPAN-based recording, DGVox supports CTI integration with Avaya IP Office.



The RTP packets are received via SPAN from the network switches while all call signaling data and events such as phone extensions, tracking calls from cradle to grave, and business data/call variables come from the TAPI link with Avaya IP Office.

These call signaling events are combined with the RTP data streams to create the recorded call and associate the recordings with the correct agent. This configuration scenario is useful in environments where agents work in shifts and the same seat will be used by multiple agents.

The typical configuration was verified using IP Office 500 V2 R8.1 and compatible with IP Office Server Edition as well.

<u>Note:</u> The detailed administration of contact center devices, as well as the port mirroring of the layer 2 switch are not the focus of this application notes.

3. Avaya IP Office - License Verification

This section explains the license requirements of Avaya IP office to link with DGVox voice logger.

Launch the application, IP Office manager from the server/Desktop.

- Select Start -> Programs-> IP Office-> Manager to launch the application.
- Select the proper IP Office system, and log in using the appropriate credentials.
- The Avaya IP Office R8.1 Manager screen is displayed.
- From the configuration tree in the left pane, select License _ CTI Link Pro.
- The CTI Link Pro screen would be displayed on the right pane.
- Verify that the License Status is "Valid".

🖬 Avaya IP Office R8.1	Manager IP500V2 [8.1(63)]		
File Edit View Tool	ls Help License CTI Link res 🗮	ro 💽 : 🏖 🖙 - 🖬 💽 💽 CTI Link Pro	
IP Route (2) Account Code (0) Account Code (0) Account Code (1) Account Code (2) Acount Code (2) Advanced Edit Advanced Edit Avaya IP endy Avaya IP endy Avaya Softph CTI Link Pro DECT Integrat Essential Editit Essential Editit IPSOU Univers IPSOU Univers IPSOU Univers IPSOU Univers IPSOU Univers Office Worker Office Worker Office Worker Office Worker	indpoints tion points tion points points one License tion (ports) on on Additional Voicem sal PRI (Additional ch letworking Channels pgrade	NAM CTI Link Pro Valid 255 Never	

Obtain IP Address and Mac Addresses of IP Phones

Launch the application, IP Office manager from the server/Desktop

- Select Start -> Programs -> IP Office -> Monitor to launch the application.
- The Avaya IP Office R8.1 SysMonitor screen is displayed as shown below.
- Select Status ->H323 Phone Status from the top menu.



- The IPPhoneStatus screen is displayed.
- Make a note of the IP address and MAC address associated with each extension number the agents may be using.

Total Confi Total Regis	neStatus gured: 5 stered: 5		Regi	stered Status	Waiting 3 secs	for update	
Extn Num	Phone Type	Licensed	IP Address	Mac Address	Version Id	EP identifier	Status
20031 20032 20033 20034 20035	1608 1616 9611 1608 9650	1 1 1 1 1	10.32.39.105 10.32.39.117 10.32.39.118 10.32.39.119 10.32.39.107	00-07-3b-93-63-f3 00-53-04-90-08-3a 70-38-ee-c9-d5-18 00-07-38-18-53-b0 00-04-0d-fa-0f-bb	1.302S 1.302S 6.2209 1.302S 3.105S	IP500V2_50f6a IP500V2_50f6a IP500V2_50f6a IP500V2_50f6a IP500V2_50f6a	RAS: Registered RAS: Registered RAS: Registered RAS: Registered RAS: Registered
Cisplay O	ptions All C B	egistered	C UnRegistered	Print	Reset Phor	les Canci	el

Port Mirroring (SPAN) capability of the Network Switch

Network switch need to be enabled with "SPAN port" or "port mirroring" for all PBX extension ports to forward traffic to the DGVox port. The DGVox VoIP voice logger is connected to the SPAN port.



4. DGVox Configuration

Execute the **DGVox Management console program** (default location as C:\SpeechLogix\DGVox).

a. Go to IP recorder settings ->General settings, Enable IP Office integration.

General Settings Exte License Channel No	VUX nsion Settings	Phone Settin	gs Media Settings VoxSIPTrunk Recorde < >	Phone Settings Media Settings VoxSIPTrunk Recorder Settings IP Office Integration IP Office Integration Settings AgentID Key *35 IP Log
General PBX Type Media Forwarding IF	Avaya 192.168.2.37	×	Port Info Port 2000	Delimit Key *
Log Level Recording Mode SIP Proxy	DEBUG V IP ADDRESS V 0.0.0.0		 Target Recording ♥ Enable Filtering Aux_Recording ♥ Digit From Display IP Office Integration 	Extension V Physical Device
Message Center			<u>Apply</u> <u>Cancel</u>	Apply Cancel
	≻ Updates ► Rec	VOXIP Rec corder serv	corder General Settings. Restart VOXIP ice after updation(Recommended)	Updates IP Office Integration Settings

- b. From the **IPOffice Integration** tab provide the settings as below.
 - Enter the feature key being used for logging in an extension using hot desking feature. For eg: If an agent login to a phone using his login id as 101 and feature key as *35; Then **AgentID key** as *35 and **Delimit key** as *
 - Enter the extension numbers, Agent login ID in the **IP Office Extension** section. After entering each extensions, click **Apply** button.
 - Extension numbers which are allocated statically to each phone should be marked as **Physical Device**; whereas Agent Log in ID should not be marked as **Physical Device**.
- c. From the General settings tab
 - Select **Recording mode** as IP address; if the phones have static IP.
 - Select **Recording mode** as mac address; if the phones are in DHCP pool.

SpeechLogix Limited

ieneral Settings Ext	ension Settings	Phone Settings	Media Settings	VoxSIPTrunk Recorde	
License Channel No	500	~	Index	1	
General PBX Type	AVAYA		ort Info S Port AS Port	1720 1719	
Log Level Recording Mode	DEBUG IP ADDRESS 0.0.00	DEBUG Target Recording C Enable Filte IPADDRESS Aux_Recording Digit From D 0.0.0 IP Office Integration			
			Арріу	Cancel	
Message Center					

d. From the Extension Settings tab

🔄 VOXIP Recorder Settings 📃 🗖 🗙								
General Settings	Extension Settings	Phone Settings	Media Settings	VoxSIPTrunk	Record Close			
- End Point Deta	ils							
Channel ID IP Address	001	MAC Addre Extension						
Board ID				<u>A</u> p	ply			
Extension Deta	Extension Details Call Info EVT_CISCO_SCCP_CALL_INFD=4736							
		.,		Δp	ply			
				<u>C</u> a	ncel			
Message Lenter Updates VOXIP Recorder Extension Settings. Restart VOXIP Recorder service after updation[Recommended]								

- Enter the IP address of each extension in the **IP Address** field; if the extension phones have static IP assigned. *Else*
- Enter mac address of each extension in the **Mac Address** field; if the extension phones are assigned with DHCP.
- Enter the extensions number of the phone in the **Extension** field.

5. <u>Resource Required</u>

5.1) Server/ High End PC

The minimum hardware specification as:

- Intel Dual core 2.0 or above | Ram >= 4 GB | Hard Disk >= 40 GB | Dual NIC supports 10/100/1000. OR
- VMWare; VMWare ESXi 4.1 and higher versions are supported (Promiscuous mode need to enable on the VM. Ensure one USB port and one NIC port dedicated for the DGVox application)
- Windows OS 32 or 64 bit Windows 7 pro, Win 8.1 Pro, Windows 2003 Server (SP2), Windows 2008 Server 32 and 64 bit.
- Web Browsers Supported: Microsoft Internet Explorer 7 or above

5.2) DGVox Application Tool Kit:

- The CTI USB dongle is an essential component of DGVox call recording solution that provides packet filtering and media forwarding for IP-PBXs. The USB is designed to service low to medium density solutions and is capable of monitoring and forwarding 400 concurrently active calls.
 - Supports 10/100/1000 network interfaces.
 - Decodes proprietary VoIP signaling as well as standard SIP and H.323 (Cisco Call Manager (Skinny), Avaya Office Manager (H.323), IP Office, Ericsson (H.323), Nortel (Unistem/SIP), SIP (Station Side/ Trunk Side), H.323 (Station Side/ Trunk Side), Alcatel OmniPCX 4400, Siemens Hi-Path 4000, Intertel CS-5200, NEC NEAX 2400, ShoreTel (VOX only), and more......)
- 2) Application Installer Media Kit (Includes CTI Driver, Application setup, User Manuals)

6. Installation of DGVox Voice Logger for IP Office is briefly mentioned below:

- Operating System configuration (UAC settings, IIS , IE 8).
- Switch on the server and insert the dongle to the USB port.
- Install the CTI driver from the installation CD.
- CTI configuration Control panel settings of the CTI card.
- DGVox Software Installation.
- Configuring DGVox Configuration settings in DGVox Management Console.
- Refer the installation guide for the detailed description.

7. DGVox PORT LIST:

The following are the ports used by the DGVox application:

UDP ports: 3001 - 3011, 5060, 5501, 6003, 6005, 6501, 6502, 10029.

Http port: 80

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