

Deploying SmartTAP™ 360° in Microsoft Azure Marketplace

Version 5.6 and later

smart**TAP** 360°



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Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

Related Documentation

Document Name
SmartTAP Release Notes
SmartTAP Installation Guide
SmartTAP Administrator Guide
SmartTAP for Teams Deployment Guide
SmartTAP with Genesys Integration Guide
SmartTAP Hardware and Software Requirements

General Notes, Warnings, and Safety Information



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27426	Update to the virtual machine specifications.

Documentation Feedback

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1 Introduction

AudioCodes SmartTAP 360° SIP Recording (SIPRec) solution is available as an Azure cloud-based application in Microsoft Marketplace. It can be deployed as a virtual machine in an Azure subscription and can record calls processed by AudioCodes Session Border Controllers (SBC) that are deployed in Azure or other private or public cloud platforms, or on-premises.

This document describes how to install SmartTAP 360° from Azure Marketplace and how to configure it for SIPRec-based recording of calls. It also describes how to configure the SBC for SIPRec so that it can send the recorded calls to SmartTAP 360°.



Note: This document assumes the following:

- The SBC is installed and connected to the network.
- The SBC is licensed for SIPRec (demo or purchased license).
- You have a Microsoft Azure subscription (account).

1.1 SmartTAP 360° Overview

AudioCodes SmartTAP 360° is an intelligent, compliance-grade, Enterprise recording platform for voice, video and IM interactions. Supported by the AudioCodes voice expertise and tailored for specific organizational needs, SmartTAP 360° can be easily deployed and integrated with Microsoft Skype for Business, Direct Routing for Microsoft Teams, and with any Enterprise PBX, using AudioCodes Session Border Controller (SBC) and Media Gateway. By using SmartTAP 360°, Enterprises can record any call to meet company regulation and compliance demands, as well as capture and index Enterprise voice calls for later-stage Voice.AI analysis,

The default SmartTAP 360° download through Azure Marketplace supports the SIPRec-based recording up to 50 simultaneous Enterprise calls and packed with 4 recording licenses for evaluation. Additional licenses can be purchased through AudioCodes Partners. Professional Customer support is also available at an additional charge.

For more information:

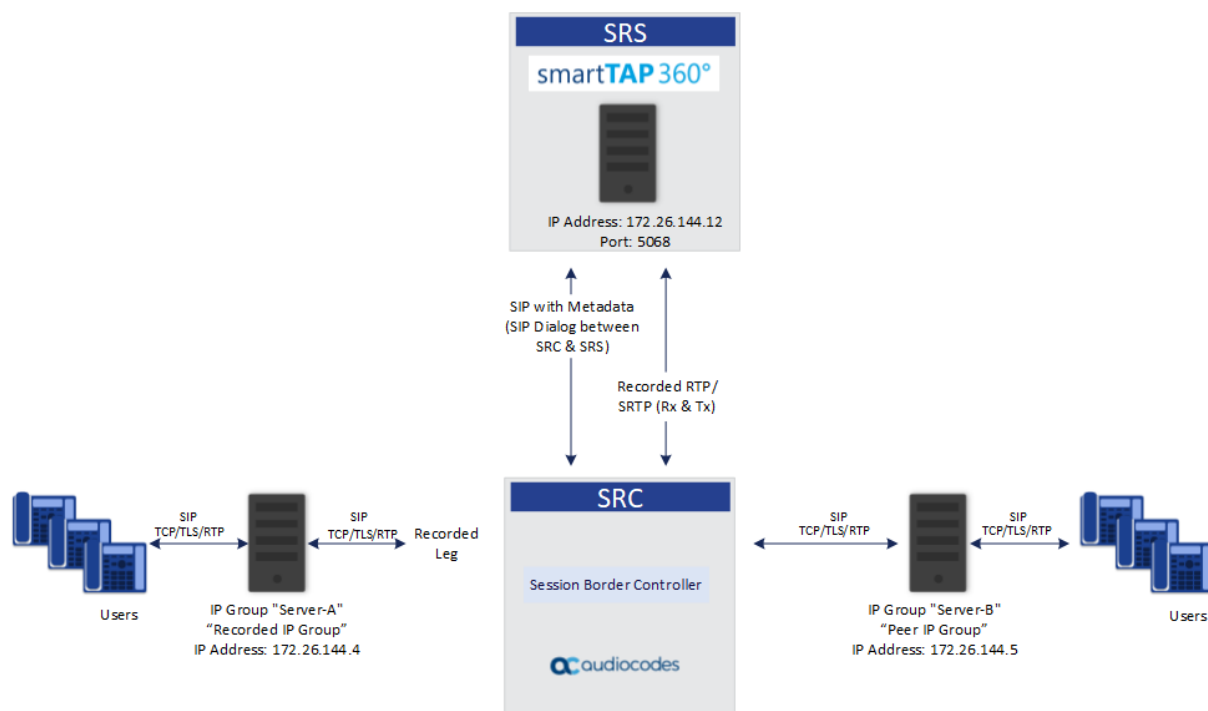
- Website: <https://www.audiocodes.com/solutions-products/products/products-for-microsoft-365/smarttap-360-recording>
- User's Guide: <https://www.audiocodes.com/media/13795/smarttap-administrator-guide-ver-43.pdf>

1.2 SBC SIPRec Overview

The SBC can record SIP-based media (call) sessions in accordance with the Session Recording Protocol (SIPRec) standard. This standard describes architectures for deploying session recording solutions and specifies requirements for extensions to SIP that manages delivery of RTP media to a recording device.

The SBC functions as a Session Recording Client (SRC), sending recording sessions to a third-party Session Recording Server (SRS). The SBC records calls between two IP Groups. The type of calls to record can be specified by source and/or destination prefix number or SIP Request-URI, as well as by call initiator (caller). The SBC records calls on a leg interfacing with a specified IP Group. The specified leg is important as it determines the various call media attributes of the recorded RTP (or SRTP), such as coder type. Once a session is established between the call parties, the SBC initiates a SIPRec recording session with the SRS (SmartTAP 360°), by sending it a SIP INVITE message.

Figure 1-1: SBC SIPRec Overview



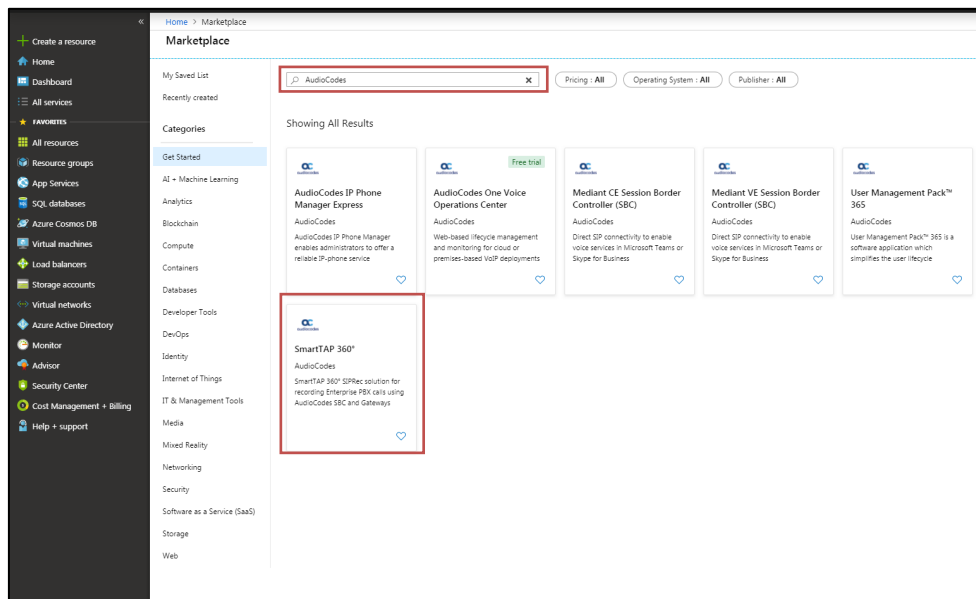
2 Deploying SmartTAP 360° on Azure Marketplace

You can install and deploy SmartTAP 360° as a virtual machine on the Microsoft Azure cloud computing platform, using Microsoft's Web-based Azure portal. The portal's Marketplace store provides the SmartTAP 360° product for installation.

➤ **To deploy SmartTAP 360° on Azure Marketplace:**

1. Open the Azure portal at <https://portal.azure.com/>, and then log in with your Azure account credentials.
2. Navigate to the Azure Marketplace (**All services** > **Marketplace**).
3. In the search bar, type the string "AudioCodes" to search for all AudioCodes products that are published on Azure Marketplace:

Figure 2-1: Search Results for "AudioCodes" in Azure Marketplace



4. In the searched results list, click the **SmartTAP 360°** product; an overview of SmartTAP 360° is displayed:

Figure 2-2: SmartTAP 360° Product Overview in Azure Marketplace



5. Click **Create**; the installation wizard for deploying a new SmartTAP 360° appears, starting with Step1 **Basics**:

Figure 2-3: Step 1 - Basics

The screenshot shows the 'Create SmartTAP 360° - Enter...' installation wizard. The left pane shows a progress bar with five steps: 1. Basics (selected), 2. Virtual Machine Settings, 3. Network Settings, 4. Summary, and 5. Buy. The right pane shows the 'Basics' step with the following fields:

- * Virtual Machine name: smarttap-siprec
- * Username: (empty)
- * Password: (empty)
- * Confirm password: (empty)
- Subscription: Smarttap (dropdown)
- * Resource group: Select existing... (dropdown) with a 'Create new' link below it.
- * Location: (US) West US (dropdown)

6. For Step1 **Basics**, do the following:
 - a. In the 'Virtual Machine name' field, enter a unique name for the new virtual machine.
 - b. In the 'Username' field, enter a username.
 - c. In the 'Password' field, enter a password.
 - d. In the 'Confirm password' field, re-enter the password.

**Note:**

- The username and password are the same as the default Administrator user of SmartTAP 360°, which is also used to connect to the Web-based management interface of the deployed SmartTAP 360°.
- Azure imposes some limitations on username and password. For example, it prohibits the use of "Admin" for username and requires the use of strong passwords that meet the following policy:
 - ✓ A minimum of 12 characters
 - ✓ Use of three out of four of the following: lowercase characters, uppercase characters, numbers, and symbols

- e. From the 'Subscription' drop-down list, select a proper subscription for your deployment.
 - f. Under 'Resource group', select an existing Resource Group or click **Create new** to create a new Resource Group name for your deployment.
 - g. From the 'Location' drop-down list, select a proper location for your deployment.
7. Click **OK**; Step 2 **Virtual Machine Settings** appears:

Figure 2-4: Step 2 - Virtual Machine Settings

Create SmartTAP 360° - Enter... × **Virtual Machine Settings** □ ×

1 Basics Done ✓

2 Virtual Machine Settings > Configure the virtual machine's re...

3 Network Settings > Configure network resources and ...

4 Summary > SmartTAP 360° - Enterprise Intera...

5 Buy >

* Virtual machine size ⓘ
1x Standard DS2 v2
2 vcpus, 7 GiB memory
[Change size](#)

Azure Hybrid Benefit.
[Learn more](#)

Use existing Windows license ⓘ

Boot diagnostics ⓘ

8. For Step 2 **Virtual Machine Settings**, define the virtual machine:
 - a. Choose the virtual machine size, by clicking **Change size**. SmartTAP 360° supports the following sizes:
 - ◆ **Low-profile:** DS2_v2, 2 vCPUs, 7-GB RAM, SmartTAP for up to 3,000 users and 50 concurrent audio recordings. Post recording features for this machine specification are limited to basic playback and download. In case of maximum recording levels of 50 concurrent audio calls, the playback and download of recordings may be delayed or take a longer time to complete.
 - ◆ **Middle-profile:** One of the following:
 - ✓ DS3_v2, 4 vCPUs, 14 GB RAM with SmartTAP for up to 3,000 users and 250 concurrent audio recordings.
 - ✓ F8s_v2, 8 vCPUs, 16 GB RAM with SmartTAP for up to 3,000 users and 250 concurrent audio recordings.
 - ◆ **High-profile:** DS4_v2, 8 vCPUs, 28 GB RAM, SmartTAP for up to 3,000 users and 600 concurrent audio recordings.
 - ◆ **Distributed deployment:** One Ds3_v2 for SmartTAP Server (FE, DB, BE) and two DS4_v2 each handling 500 ccs can be deployed for up to 3,000 users and 1000 concurrent audio recordings.

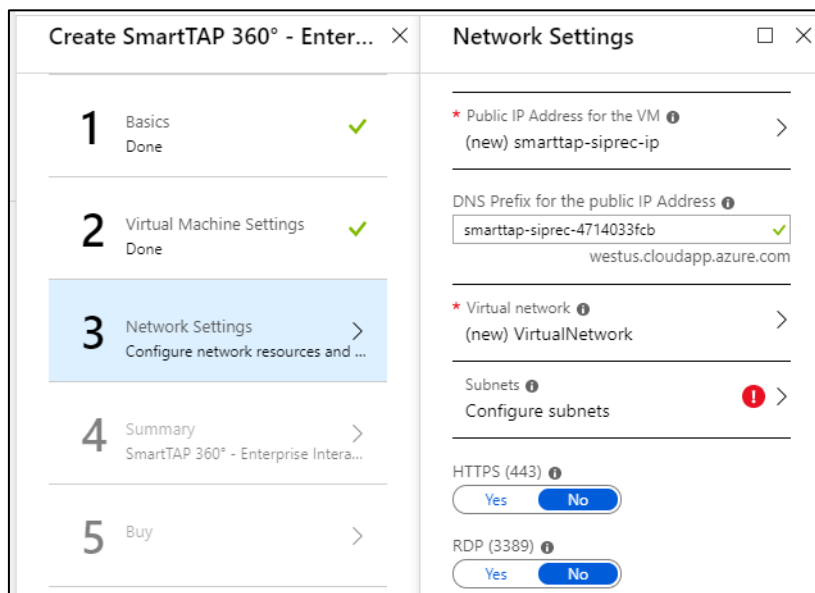


Note:

- The disks should be premium SSD managed disks.
- SmartTAP database disk cannot be changed after the installation.
- SmartTAP media storage configuration can be changed after the installation.
- The additional managed disks are not required for POC if the SmartTAP Server's OS disk has sufficient space.
- The size of the media disk should be calculated (using the SmartTAP storage calculator) with the provision of sufficient space for the ongoing recordings and in the case of Azure Blob storage, for recordings that might need to be buffered when there is a temporary disconnection with Azure. See Section 5.4 to configure SmartTAP to utilize the additional media disk.
- The additional media disk is not required for lower loads of up to 50 concurrent audio recordings, however it's recommended.

- b. If you have Azure Hybrid Benefits, for 'Use existing Windows license', click **Yes**.
 - c. If you want to enable Azure monitoring (e.g., system snapshot) for your virtual machine, for 'Boot diagnostics', click **On**.
9. Click **OK**; Step 3 **Network Settings** appears:

Figure 2-5: Step 3 - Network Settings



Create SmartTAP 360° - Enter... ×

Network Settings □ ×

1 Basics Done ✓

2 Virtual Machine Settings Done ✓

3 Network Settings > Configure network resources and ...

4 Summary SmartTAP 360° - Enterprise Intera... >

5 Buy >

*** Public IP Address for the VM** ⓘ >
(new) smarttap-siprec-ip

DNS Prefix for the public IP Address ⓘ
smarttap-siprec-4714033fcb ✓
westus.cloudapp.azure.com

*** Virtual network** ⓘ >
(new) VirtualNetwork

Subnets ⓘ >
Configure subnets ⓘ

HTTPS (443) ⓘ
Yes No

RDP (3389) ⓘ
Yes No

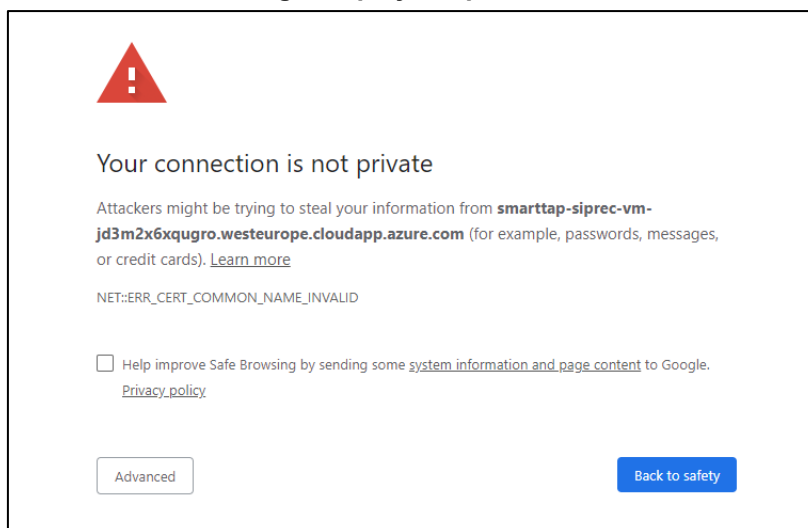
- 10.** Step 3 **Network Settings**, do the following:
- Configure the virtual machine's Public IP Address. You can create a new Public IP Address or select an existing one.
 - Configure the DNS prefix for the Public IP Address.

- c. Configure the virtual network where the new virtual machine will be deployed. You can create a new virtual network or select an existing one:
 - ♦ If you choose an existing Virtual Network, use the same network as the SBC.
 - ♦ If you choose to create a new Virtual Network (different from the SBC's), then Network Peering must be configured.
 - d. Configure the subnet for the network interface. You can create a new subnet (for new virtual network) or select an existing one.
 - e. If you want to access SmartTAP 360° management interface from the WAN (external network), for the 'HTTPS', click **Yes**.
 - f. If you want to connect to SmartTAP 360° from the WAN (external network), for 'RDP', click **Yes**.
11. Click **OK**, and then review your deployment settings.

2.1 Initial Access to Deployed SmartTAP 360°

By default, SmartTAP 360° is configured for HTTPS and uses a default self-signed certificate for private HTTPS access to its Web-based management interface. Therefore, when initially accessing the SmartTAP 360° management interface, your browser may display the following message:

Figure 2-6: Browser Message Displayed upon Initial SmartTAP 360° Access



To accept the certificate and access the management interface, click **Proceed to ...** (depends on your browser). Log in to SmartTAP 360° with your credentials that you provided in the previous section.



Note: For generating and loading an HTTPS certificate, refer to the *SmartTAP Administrator's Guide*. (HTTPS is already enabled on SmartTAP 360°; you only need to generate a certificate.)

2.2 Deleting Deployed SmartTAP 360°

If you need to delete the deployed SmartTAP 360° (for whatever reason), simply delete the corresponding Resource Group in the Azure portal.

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3 SmartTAP 360° Licenses

SmartTAP 360° provides you with a free evaluation license for recording up to four concurrent calls. For recording more calls, you can purchase additional licenses through AudioCodes Partners. Professional customer support is also available at an additional charge.

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4 Configuring SIPRec on SmartTAP 360°

By default, SmartTAP 360° provides a pre-defined user, called "Demo" that you can use for call recording (SIPRec). All you need to do is to change the telephone number associated with the call that you want to record. In addition, SmartTAP 360° also provides a recorded call of the "Demo" user for you to listen to and explore the features of the SmartTAP 360° recording playback feature.



Note: By default, SmartTAP 360° stores call recordings to the virtual machine's OS disk in the folder *C:/media*. To change this storage location, refer to the *SmartTAP 360 Administrator's Guide*.

➤ **To use the Demo user for recording your calls:**

1. Log in to the SmartTAP 360° Web-based interface.


Figure 4-1: Logging in to SmartTAP 360°

The screenshot shows the login interface of the SmartTAP 360° web-based interface. At the top, there is a dark blue header bar containing the 'audiocodes' logo on the left, the text 'smartTAP 360°' in the center, and a 'Voice AI' button on the right. Below the header, the main content area is light blue. In the center of this area is a login form. The form consists of two labels, 'Login Id:' and 'Password:', each followed by a white input field. Below these fields is a 'Log in' button.

2. Open the View/Modify Users page (**Users** tab > **User Management** folder > **View/Modify Users**).

Figure 4-2: View/Modify Users Page

The screenshot shows the 'View/Modify Users' page in the SmartTAP 360° interface. The sidebar on the left contains navigation options: System, Users (highlighted with a red box), Status, Calls, and Messages. The main content area displays a table of users with columns for First Name, Last Name, Email, Login Id, and Id / Alias. Two users are listed: 'Demo User' and 'Initial User (PLEASE DELETE)'. The 'Demo User' row has a 'Modify' button (pencil icon) and a 'Delete' button (trash icon) highlighted with red boxes. The 'Initial User' row also has 'Modify' and 'Delete' buttons. A pagination bar at the bottom shows '20' items per page and '(1 of 1)' total items.

3. Click the **Modify**  button corresponding to the "Demo User".
4. In the 'TelUri' field, enter the telephone number that will be participating in the calls that you want to record.

5. Click **Submit** to save your settings.

Figure 4-3: Changing Telephone Number of Demo User

The screenshot displays the 'Modify User' interface. At the top, a blue header bar contains the text 'Modify User'. Below this, the form is organized into several sections. On the left, there is a placeholder for a user profile picture. To the right of the picture, the following fields are visible: 'First Name' (containing 'Demo'), 'Last Name' (containing 'User'), 'Email' (empty), 'Login Id' (containing 'demo-user'), 'Id / Alias' (empty), 'TelUri' (containing '+17324690880' and highlighted with a red border), 'Retention Policy' (a dropdown menu set to 'Default'), 'Recording Profile' (a dropdown menu set to 'Full Time'), and 'Legal Hold' (set to 'OFF'). Below these fields, there are two list boxes. The 'Security Profiles' list on the left contains 'administrator', 'agent' (which is highlighted), and 'supervisor'. The 'Groups' list on the right contains 'Default'. At the bottom right of the form, there are four buttons: a green 'SUBMIT' button, a red 'CANCEL' button, a red trash can icon, and a red key icon.

To listen to the demo recorded call of the Demo user, follow the below procedure.

➤ **To play the recorded call of Demo user:**


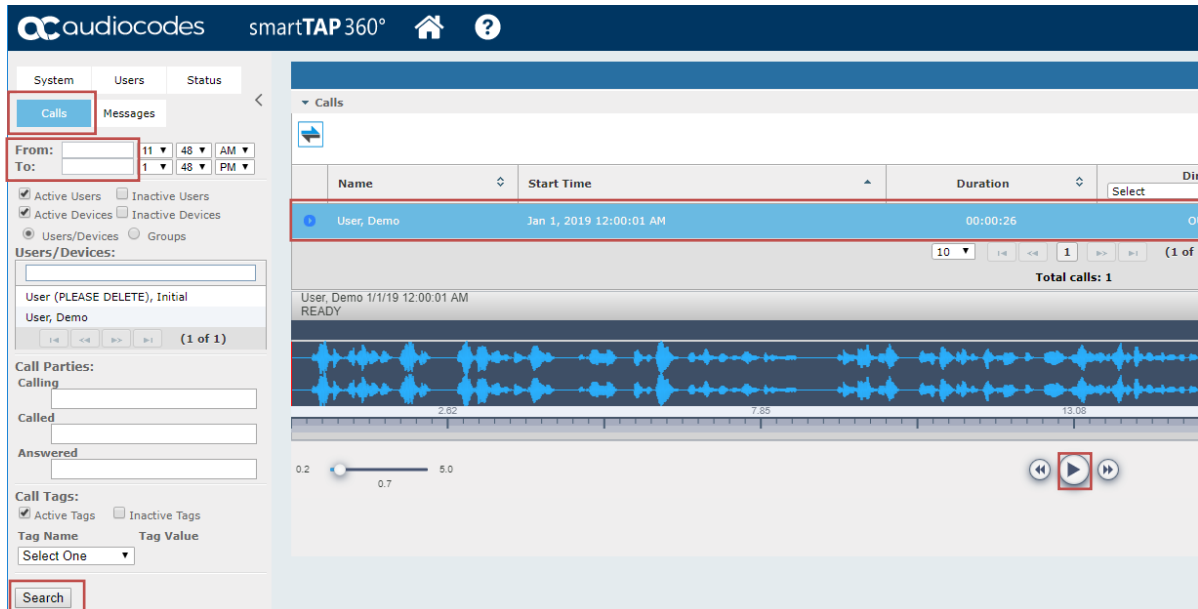
1. Click the **Calls** tab.
2. In the 'From' and 'To' fields, delete the date.
3. Click **Search**.
4. In the right pane, select the Demo User call ("User, Demo"), and then click the  play button to listen to the recording.

Figure 4-4: Playing Recorded Call of Demo User



4.1 Configure Network Settings for SmartTAP Media Server

It is necessary to configure the SmartTAP Media Server component configuration file for networking with SmartTAP 360° SIPREC as follows:

- In case the connection to the SmartTAP 360° SIPREC Server on Azure is over the Internal IP address of the SmartTAP 360° SIPREC Server, configure parameter 'Data_IP=<Internal IP>' in the file shown in procedure below.
- In case the connection to the SmartTAP 360° SIPREC on Azure is over the Azure Public IP address, configure parameter 'Public_Data_IP=<public IP>' in the file shown in procedure below. This parameter should be added for cloud integrations requiring media transfer through the Azure Public IP address.

➤ **To configure the media server:**

1. Open a text editor and configure the following file: ST system path: C:\Program Files (x86)\AudioCodes\SmartTAP\MS\Server\Bin\achmp20.ini.
2. Under: [Main] configure the following:

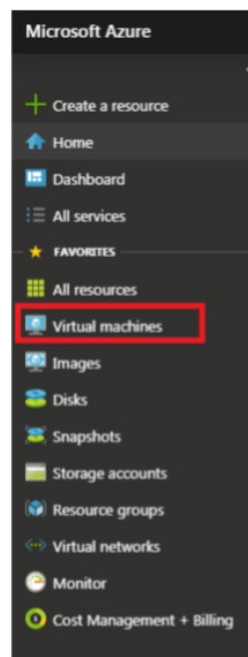
```
Data_IP=<Internal IP>  
Public_Data_IP=<Public IP>
```

Where

- <Internal IP> is the Internal IP address of the SmartTAP 360° SIPREC Server on Azure
- <Public IP> is the Public IP address of the SmartTAP 360° SIPREC Server on Azure

To find the relevant IP address, navigate to the **Virtual Machine Settings** tab as shown below:

Figure 4-5: Virtual Machine Settings



Resources, services, and docs

markk@audiocodes.c... AUDIOCODES LTD

Connect Start Restart **Stop** Capture Delete Refresh

Resource group (change) : AUDC

Status : **Creating**

Location : West Europe

Subscription (change) : Newwave AZURE LAB

Subscription ID : d5dcb05d-0f24-4679-970d-3e0309d2bd79

Computer name : OVOC-7-6-1000

Operating system : Linux

Size : Standard F16s (16 vcpus, 32 GB memory)

Public IP address : **40.118.83.214**

Private IP address : **10.0.7.10**

Virtual network/subnet : AUDCvnet295/default

DNS name : [Configure](#)

Tags (change) : [Click here to add tags](#)

Show data for last: **1 hour** 6 hours 12 hours 1 day 7 days 30 days

CPU (average)

100%
80%
60%
40%
20%
0%

4:30 PM 4:45 PM 5 PM 5:15 PM

Percentage CPU (Avg)
OVOC-7-6-1000

Network (total)

100B
80B
60B
40B
20B
0B

4:30 PM 4:45 PM 5 PM 5:15 PM

Network In Billable...
OVOC-7-6-1000

Network Out Billable...
OVOC-7-6-1000

Disk bytes (total)

100B
80B
60B
40B
20B
0B

4:30 PM 4:45 PM 5 PM 5:15 PM

Disk operations/sec (average)

100/s
80/s
60/s
40/s
20/s
0/s

4:30 PM 4:45 PM 5 PM 5:15 PM

3. Save and close the file.

5 Configuring SIPRec on SBC

This section describes SIPRec configuration on AudioCodes SBC.



Note: This section includes only main SBC configuration for SIPRec -- configuring the SRS entity (i.e., SmartTAP 360°) and configuring SIPRec rules. For configuration not covered in this document (e.g., entities of the recorded parties and routing rules), please refer to the *User's Manual* of the relevant SBC product, which can be downloaded from <https://www.audiocodes.com/library/technical-documents>.

SIPRec functionality is a licensed feature. Therefore, prior to configuring the SBC for SIPRec, make sure that its License Key contains the SIPRec license feature.

➤ **To verify SIPRec license on SBC:**

1. Access the SBC's Web interface.
2. Open the License Key page (**Setup** menu > **Administration** tab > **License** folder > **License Key**).
3. Verify that the License Key includes the "SIPRec Sessions" license and that it displays the correct number of licensed SIPRec sessions, as shown in the example below:

Figure 5-1: Verifying SIPRec License

The screenshot shows the AudioCodes SBC Web interface. The left sidebar contains a navigation menu with options like TIME & DATE, WEB & CLI, SNMP, LICENSE, and MAINTENANCE. The 'LICENSE' section is expanded, showing 'License Key' and 'Floating License'. The main content area displays the 'License Key' configuration page. At the top, it shows 'Local License Key' with 'Serial Number' 5967925 and 'Device Type' 24. Below this, there are several sections of license features and their counts:

Product Key	Local License Key	Serial Number	Device Type
5967925	24		

The 'GENERAL' section includes:

- High Availability (HA): 30
- DSP Channels: 30
- IPMedia DSP Channels: 10

The 'VOIP SIGNALING PROTOCOLS' section includes:

- SIP: 30
- MGCP: 30

The 'SBC CAPACITY' section includes:

- SBC Sessions: 50 (Local) / 50 (Actual)
- TDM-to-SBC Sessions: 30 (Local) / 30 (Actual)
- TDM-to-SBC: 30 (Local) / 30 (Actual)
- SBC Signaling Sessions: 20 (Local) / 20 (Actual)
- SBC Media Sessions: 20 (Local) / 20 (Actual)
- Far End Users (FEU): 5 (Local) / 5 (Actual)
- Transcoding Sessions: 10 (Local) / 10 (Actual)

The 'VOIP FEATURES' section includes:

- Voice Quality Monitoring: 20
- WebRTC: 20
- SIPRec Sessions: 4** (highlighted with a red box)
- SIPRec Redundancy: 2
- Test Call: 5
- RTCP-XR: 5
- Media Enhancement: 5

The 'TELEPHONY INTERFACES' section includes:

- FXS Ports: 4
- FXO Ports: 4
- BRI Trunks: 2
- E1 Trunks: 2
- T1 Trunks: 2

The 'CODERS' section includes:

- G.723, NETCODER, AMR, G.729, G.727, G.728
- GSM-EFR, GSM-FR, EVRC, QCELP, ILBC, EVRC-B
- AMR-WB, G.722, Enhanced G.711, MS RTA-NB
- MS RTA-WB, SILK-NB, SILK-WB, Speex-NB, Speex-WB
- Opus-NB, Opus-WB

The 'PSTN PROTOCOLS' section includes:

- CAS: 5

The 'SECURITY FEATURES' section includes:

- IPSec: 5
- Media Encryption: 5
- Strong Encryption: 5
- Encrypt Control Protocol: 5

The 'IP MEDIA FEATURES' section includes:

- Conference: 5

At the bottom of the page, there are buttons for 'Floating License', 'Load File', 'Load String', and a 'Reset' button.

5.1 Generating TLS Context

This section describes how to generate a TLS context that is used to secure the connection between SmartTAP and the SBC.



Note:

- TLS is supported for SmartTAP Version 5.0 and later.
- SmartTAP supports TLS versions 1.0, 1.1 and 1.2.

➤ **To generate a TLS context:**

1. In the SBC Web interface, open the TLS Contexts table (**Setup** menu > **IP Network** tab > **Security** folder > **TLS Contexts**).
2. Click **New** and Generate TLS Context as shown below.

Figure 5-2: Generate TLS Context

GENERAL		OCSP	
Index	4	OCSP Server	Disable
Name	SmartTAP-SR0	Primary OCSP Server	0.0.0.0
TLS Version	Any TLS1.x	Secondary OCSP Server	0.0.0.0
DTLS Version	DTLSv1.0 and DTLSv1.2	OCSP Port	2560
Cipher Server	DEFAULT	OCSP Default Response	Reject
Cipher Client	DEFAULT		
Cipher Server TLS1.3	TLS_AES_256_GCM_SHA384:TLS_CHACHA20_POLY1305_SHA256:TLS_AES_128_GCM		
Cipher Client TLS1.3	TLS_AES_256_GCM_SHA384:TLS_CHACHA20_POLY1305_SHA256:TLS_AES_128_GCM		
Key Exchange Groups	X25519:P-256:P-384:X448		
Strict Certificate Extension Validation	Disable		
DH key Size	2048		
TLS Renegotiation	Enable		

5.2 Configuring the SRS (SmartTAP 360°)

In the SIPRec environment, SmartTAP 360° serves as the Session Recording Server (SRS) where the SBC sends the SIPRec messages (call recordings) to SmartTAP 360° on Azure. The following procedure describes how to configure the SRS on the SBC including:

- SRS as a Proxy Set
- SRS as an IP Group

➤ **To configure the SRS (SmartTAP 360°):**

1. Configure the address of the SRS. This is represented by the SBC as a *Proxy Set* configuration entity.
 - a. Open the Proxy Sets table (**Setup** menu > **Signaling & Media** tab > **Core Entities** folder > **Proxy Sets**).
 - b. Click **New**, and then configure a Proxy Set as follows and shown below:
 - ◆ Proxy Set Name to identify the Sip Recording application
 - ◆ Assign SIP Interface for SBC
 - ◆ Assign the TLS Context that you generated in Section 5.1

Figure 5-3: Configuring the SRS Proxy Set

- c. Click **Apply**; the dialog box closes and the new Proxy Set is added to the table.
- d. Select the Proxy Set and then open the Proxy Address table, by clicking the **Proxy Address** link located at the bottom of the table.
- e. Click **New**, and then configure the SmartTAP 360° SIPREC IP address on Azure as shown below.

Figure 5-4: Configuring the SRS Proxy Set Address

- f. Click **Apply**.

2. Configure the SRS entity. This is represented by the SBC as an *IP Group* configuration entity. The address of the IP Group is determined by the Proxy Set that you configured above.
 - a. Open the IP Groups table (**Setup** menu > **Signaling & Media** tab > **Core Entities** folder > **IP Groups**).
 - b. Click **New**, and then configure an IP Group, as shown below (assigning the Proxy Set that you configured previously):

Figure 5-5: Configuring the SRS IP Group

The screenshot shows the 'IP Groups [Default_IPG]' configuration window. At the top, there's a tab bar with 'GENERAL' selected. Below it, a dropdown for 'SRD' is set to '#0 [DefaultSRD]'. The main configuration area is divided into two columns. The left column, under the 'GENERAL' tab, contains fields for 'Index' (0), 'Name' (SmartTAP-SRS), 'Topology Location' (Down), 'Type' (Server), 'Proxy Set' (#0 [SmartTAP-SRS]), 'IP Profile' (--), 'Media Realm' (--), 'Contact User' (empty), 'SIP Group Name' (empty), and 'Created By Routing Server' (No). The right column, under the 'QUALITY OF EXPERIENCE' tab, contains 'QoE Profile' (--) and 'Bandwidth Profile' (--). Below these is the 'MESSAGE MANIPULATION' section with 'Inbound Message Manipulation Set' (-1), 'Outbound Message Manipulation Set' (-1), 'Message Manipulation User-Defined String 1' (empty), 'Message Manipulation User-Defined String 2' (empty), and 'Proxy Keep-Alive using IP Group settings' (Disable). There are 'View' links next to the 'Proxy Set', 'IP Profile', 'Media Realm', and 'QoE Profile' dropdowns.

- c. Click **Apply**.
3. Configure SmartTAP TLS as described in Section CD-SIPREC Support in TLS Transport in the *SmartTAP 360° Installation Guide*.



Note:

- Load a matching certificate to the SRC (SBC) that is signed by the same Trusted Root CA.
- Configure a matching port on both the SRC (SBC) and the CD-SIPREC for securing TLS communication.

4. Open Wireshark and verify that packets are successfully received over TLS port 5069 for the SmartTAP - SBC connection.

5.3 Configuring SIPRec Rules

Once you have configured all your network entities (i.e., SmartTAP 360° SRS and the call parties to record), you can configure a SIPRec rule, which defines the following:

- IP Groups whose calls you want to record:
 - 'Recorded IP Group' defines the SBC leg interfacing with the IP Group that you want to record
 - 'Peer IP Group' defines the other IP Group(s) with which the 'Recorded IP Group' is making or receiving calls
- Calling party that you want to record ('Caller'):
 - **Recorded Party** records only calls made by the 'Recorded IP Group'
 - **Peer Party** records only calls made by the 'Peer IP Group'
 - **Both** records calls made by both parties
- SRS (i.e., SmartTAP 360°) to where the SBC sends the recorded packets

The procedure below describes how to configure a SIPRec rule to record all calls made or received by the IP Group entity called "BranchNY-Users", and send the recordings to the SRS (SmartTAP 360°).

➤ **To configure a SIPRec rule:**

1. Open the SIP Recording Rules table (**Setup** menu > **Signaling & Media** tab > **SIP Recording** folder > **SIP Recording Rules**).
2. Click **New**, configure a rule as shown below:

Figure 5-6: Configuring a SIPRec Rule

The screenshot shows the 'SIP Recording Rules' configuration window. The 'GENERAL' tab is selected, displaying the following fields:

- Index: 0
- Recorded IP Group: #1 [BranchNY-Users]
- Recorded Source Pattern: *
- Recorded Destination Pattern: *
- Condition: --
- Peer IP Group: Any
- Peer Trunk Group ID: -1
- Caller: Both

The 'RECORDING SERVER' tab is also visible, showing the following fields:

- Recording Server (SRS) IP Group: #0 [SmartTAP-SRS]
- Redundant Recording Server (SRS) IP Group: --

Red boxes highlight the Recorded IP Group, Peer IP Group, and Recording Server (SRS) IP Group fields.

3. Click **Apply**.

5.4 Configuring Temporary Media Storage

Locally recorded and stored media highly utilizes system resources in the interim prior to the transfer of the media to SMB or Blob storage. As a consequence, its highly recommended to optimize system resources to prevent adverse effects on recording and playback operations.

➤ **To temporarily configure media storage:**

1. Open file C:\Program Files (x86)\AudioCodes\SmartTAP\MS\Server\Bin\ac-hmp20.ini
2. Using a text editor, edit as follows:

```
[RemoteTransferService]
SMBLocalFilePath=M:\tempmedia\rec
```

3. In C:\Program Files (x86)\AudioCodes\SmartTAP\RTS\Config\System.config
4. Set recDirectory="M:\tempmedia\rec"

For example:

```
<System webServiceBaseUrl=http://+:10132/
transferFileLocation="C:\Program Files
(x86)\AudioCodes\SmartTAP\MS\Server\Bin"
recDirectory="M:\tempmedia\rec" asList=http://127.0.0.1//>
```

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