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Recording

Customer Guide to ShoreTel TAPI-VoIP Integrations

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Customer Guide to ShoreTel TAPI-VoIP Integrations

- **Version** — This guide should be used with inContact WFO 16.2 or later.

- **Revision** — May 2016

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Introduction

Audience

This document is written for customers and prospective customers interested in using inContact Call Recording in ShoreTel VoIP telephony environments. Readers who will perform procedures in this guide should have a basic level of familiarity with IP telephony, general networking, the Windows operating system, the ShoreTel hardware and software in use, and inContact WFO.

Goals

The goal of this document is to provide knowledge, reference, and procedural information necessary to understand a proposed ShoreTel/inContact WFO integration using TAPI-VoIP, and to configure ShoreTel to support the integration.

This document is NOT intended as a specific system or network design document. If further clarification is needed, consult with your telephony vendor.

Assumptions

This document assumes the reader has access to an inContact WFO Sales Engineer, Project Manager, or other resource to assist in applying this information to the reader's environment.

Need-to-Knows

To facilitate ease of use, this document takes advantage of PDF bookmarks. By opening the bookmark pane, readers can easily refer to the portion(s) of the guide that are relevant to their needs. For example, the inContact WFO application administrator can click on the **Customer Administration Tasks** bookmark to jump directly to that section.

To expand and collapse the bookmark pane, click on the bookmark icon on the left side of the document window.

For information and procedures related to inContact WFO configuration, consult the inContact WFO installation team.

This integration combines ShoreTel TAPI with passive VoIP recording. Passive VoIP requires additional considerations and is covered in a separate document: the *inContact WFO Customer Guide to Passive VoIP Recording*. You will need to refer to that document as well as this guide.

In addition to the TAPI-VoIP integration discussed in this guide, inContact WFO also supports a ShoreTel integration using TAPI-WAV. Ask your inContact WFO representative if you want additional information on this integration method.
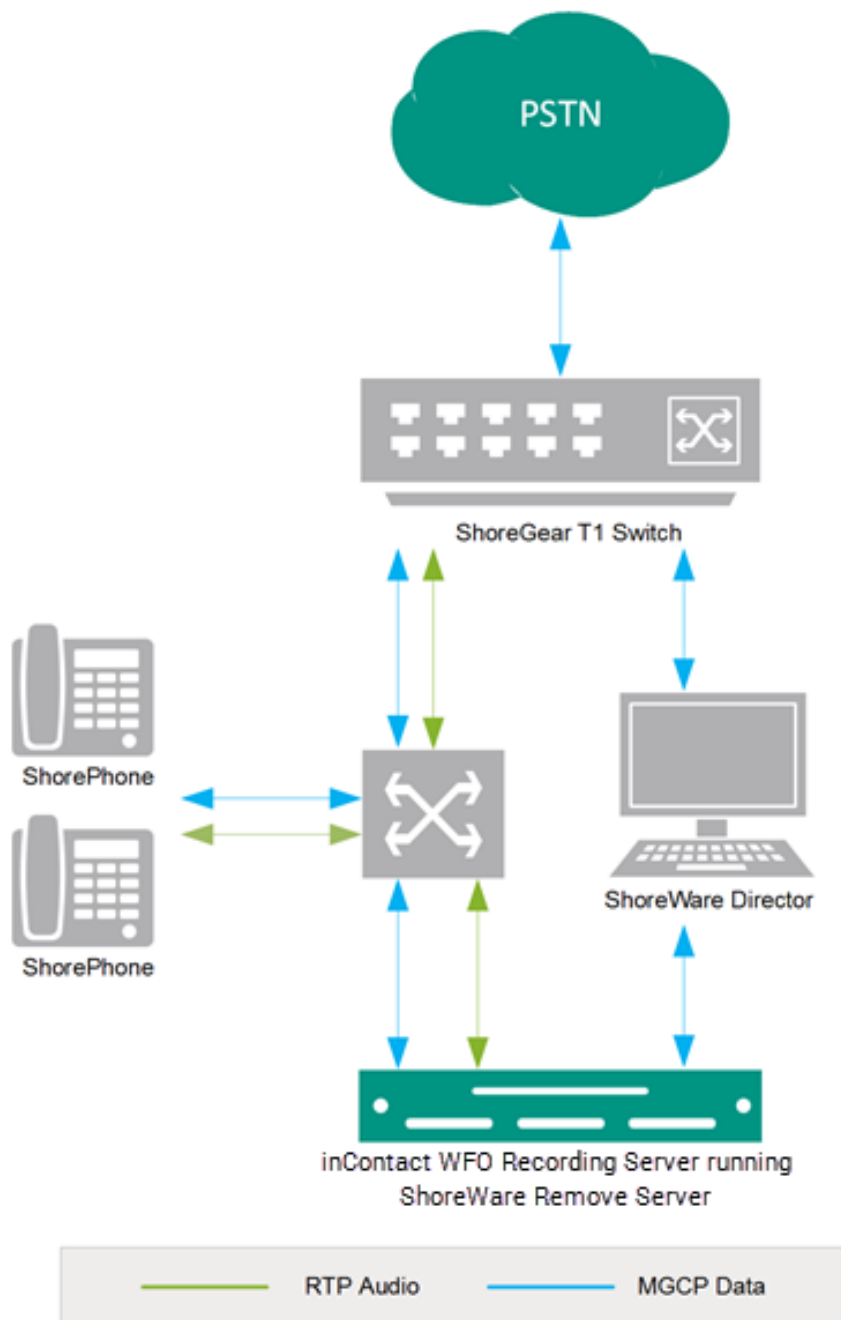
What's New in this Version

- **ShoreTel Connect integration**: This integration has been tested with the latest version of ShoreTel software, known as ShoreTel Connect. Internal testing confirms that the existing integrations are supported on this version. Interoperability testing in ShoreTel's lab environments is pending. Some ShoreTel product names have changed slightly in ShoreTel Connect versus previous versions; refer to your ShoreTel resources for any clarification regarding ShoreTel products mentioned in this guide.

Customer Responsibilities

You are responsible for supplying the physical connection(s), IP connection(s), or both, to your telephone system and LAN, as well as obtaining any licensing required by ShoreTel. You are also responsible for configuring your ShoreTel system to support the recording integration. See the Customer Integration Tasks section for additional information.

ShoreTel TAPI-VoIP Integration Overview

The ShoreTel TAPI-VoIP integration is a passive recording method that communicates with the ShoreTel system using TAPI. inContact WFO receives call control events and metadata (such as CallerID) from ShoreTel Contact Center Director. Audio for desired calls is acquired through passive VoIP recording.

General architectural example of a ShoreTel TAPI-VoIP integration; the optional ShoreTel Contact Center is not shown

Component	Function
ShoreGear T1 Switch	Provides trunking to the central office.
ShoreTel Director	Allows system administrators to configure entities of the ShoreTel Contact Center and set the system parameters. Can be configured to set call variables that are passed to the TAPI interface.
ShoreWare Remote Server	Provides the CTI connection to the ShoreTel PBX. This software must be installed on the inContact WFO recording server.
inContact WFO Server(s)	Receives audio, metadata, and call control events from the ShoreTel Contact Center Director. Associates metadata with audio and screen recordings (if applicable). Manages storage of completed files and generates call records in the inContact WFO database. Provides user interface to inContact WFO through the Web Portal.

Known Limitations

- ShoreTel uses a proprietary encryption for SIP traffic, making inContact WFO dependent on the TAPI messaging for recording. Therefore, inContact WFO does **not** support recording ShoreTel SIP phones without TAPI.

- PBX client software pieces used in this integration (for example, ShoreWare Remote Server) are only supported on Microsoft Server 2012 R2 by ShoreTel v14.2.19.42.8801.0 or higher.

- In multiple CTI Core scenarios, all recorders receive the same TAPI events from ShoreTel. Therefore, scripting, scheduling, or both must be used to distinguish which calls are recorded by each Core.

- ShoreTel TAPI integrations do not support the real-time blackout functionality in inContact WFO.

ShoreTel Requirements

Hardware

Review your ShoreTel installation and configuration guides, the administrator guides, and any hardware and system software specifications. These documents address server, agent computer, and telephone hardware requirements and restrictions that ShoreTel recommends. This integration requires:

- At least one (1) ShoreTel Voice Switch

- At least one (1) ShoreTel Connect Contact Center Director server

Software

This integration has been tested with and is supported for:

- ShoreTel version 14.2-ShoreTel Connect (version 14.2.19.42.8801.0 or higher is required if inContact WFO is to be deployed on MS Server 2012 R2).

Licensing

The integration requires the following licensing to be available:

- One (1) ShoreWare Remote Server Software license.

inContact WFO Requirements

Hardware

inContact WFO hardware requirements vary depending on system configurations. Appropriate hardware is identified during the system implementation process.

Software

This guide covers the following release:

- inContact WFO 16.2 or later

Licensing

- One (1) Voice seat license per named agent **or**
- One (1) Voice concurrent session license for each simultaneous call that will be recorded.
- Additional licensing may be required if the system includes optional features (for example, inContact Screen Recording).

Customer Configuration Overview

The following table provides a high-level overview of the customer configuration steps in ShoreTel TAPI-VoIP integrations.

Customer Configuration Steps for ShoreTel TAPI-VoIP Integrations	
1	Complete all necessary physical and IP connections between the recording server(s) and the LAN.
2	Complete the VoIP mirroring design and procedural tasks outlined in the *inContact WFO Customer Guide to Passive VoIP Recording*.
3	If desired, configure integration with ShoreTel Connect Contact Center.
4	After the inContact WFO software has been installed and the Web Portal has been configured: Install ShoreTel Remote Server and Register ShoreTel Remote Server.

Customer Integration Tasks

The information in this section is provided for your reference only. Detailed steps for ShoreTel configuration can be found in ShoreTel's documentation, which is available on the ShoreTel website. You should always use the appropriate manuals or guides from ShoreTel to install and configure ShoreTel components.

Configure Contact Center Integration

If you use ShoreTel Contact Center software, you can optionally configure Contact Center to pass call metadata through ShoreTel Contact Center Director into the TAPI events received for a phone. The inContact WFO installation team can modify the channel script to include this metadata in the call record.

For a complete description of mandatory and user-defined call profiles, and their associated user fields, see the *ShoreTel Contact Center Administrator Guide*.

To extract and store call profile information in TAPI:

1. On the Contact Center Server, in the directory in which ShoreTel Contact Center is installed, use a text editor (such as Notepad) to create a file named **shoretelcfg.ini**.

2. In the shoretelcfg.ini file, add a section named **call_profile**.

3. In the call_profile section, specify a key named **user_fields** with call profile field names as values. Separate the values with a comma. For example:

    ```
    [call_profile]

    user_fields=AGENT_NUMBER, AccNo, Balance, DueDate
    ```

4. Restart the ShoreTel Contact Center Server.

The specified call profile field values will now display in the TAPI call properties and be available to the inContact WFO channel script.

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Install ShoreTel Remote Server

After the inContact WFO installation engineer has installed the software and configured the recording Web Portal, you must install the ShoreWare Remote Server software on the recording server. The Remote Server software can usually be downloaded from the ShoreTel Director web interface at the following URL:

http://<directorhost>/ShoreWareDirector/RemoteInstall/

> ⓘ Replace <directorhost> with the TCP/IP address or host name of the customer's ShoreTel Contact Center Director server.

Follow the prompts to install the application server. When prompted for the IP address or name of the headquarters server, be sure to specify the IP address (or hostname) of the ShoreTel Contact Center Director. After a successful installation, you will be prompted to reboot the server.

For detailed instructions on installing Remote Server software, refer to the appropriate *ShoreTel Planning and Installation Guide* for the PBX version.
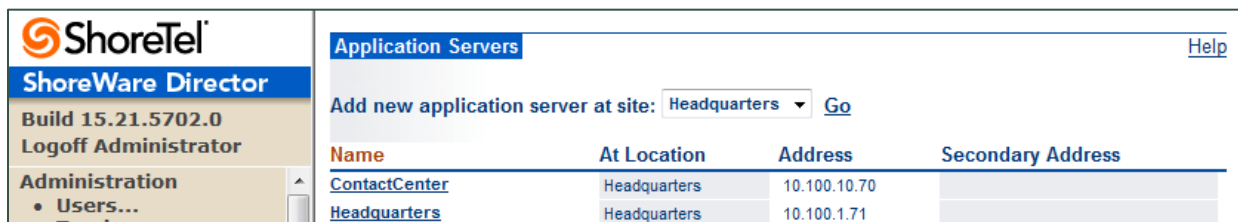
Register ShoreTel Remote Server

Once the Remote Server software has been installed, you must register the recording server in ShoreTel Connect Contact Center Director.

1. Go to the ShoreTel Contact Center Director Web administration site at the listed URL:
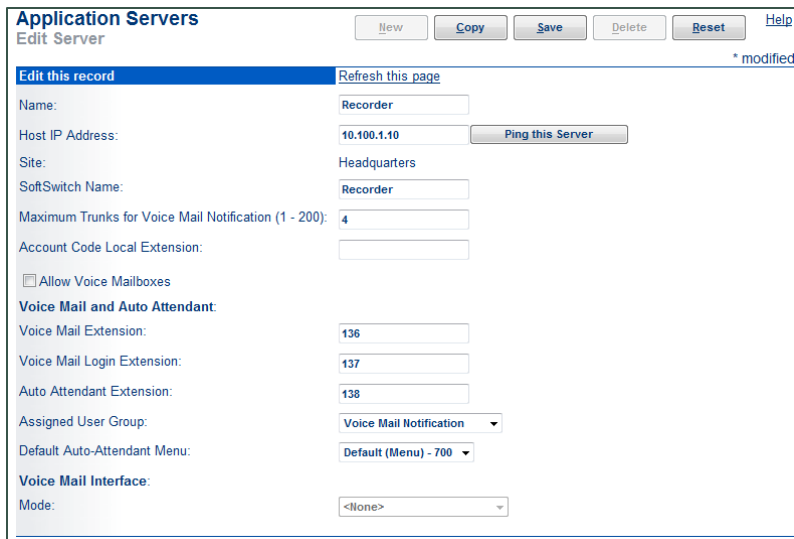   **http://<directorhost>/ShoreWareDirector/**

> ⓘ Replace <directorhost> with the TCP/IP address or host name of the ShoreTel Director Server.

2. Log in with an appropriately-permissioned account.

3. Under **Administration**, click **Application Server**.

4. On the Application Servers page, select the site to which the application server will be added and click **Go**.

5. On the Edit Server page, enter a **Name** for the inContact WFO recording server.

6. In the **Host IP Address** field, enter the IP address of the inContact WFO recording server on which you installed the Remote Server software.

7. Clear the check box for **Allow Voice Mailboxes**.

8. Click **Save**.

Customer Administration Tasks

During ongoing use of the system, your inContact WFO administrator may need to configure new channels or reconfigure existing channels. This integration requires changes to the Voice Boards page in the inContact WFO Web Portal when channels are added.

Voice Boards Overview

Voice Boards control how inContact WFO acquires audio. This component provides **what** inContact WFO is to record. At least one Voice Board is required for most integrations. While Voice Boards can correspond to physical audio capture boards in some integrations, they are not those boards.

inContact WFO uses per-channel licensing, and each Voice Board software component maintains the count of licensed, used and available channels associated with it. The system will not use any Voice Boards or channels for which it is not licensed.

Voice Board Configuration

The ShoreTel TAPI-VoIP integration acquires audio by means of passive VoIP recording. If channels are added to your system, you will need to increase the channel count and configure the new channel(s) on the associated Voice Board. The basic procedure for configuring Voice Board channels is the same for all integrations and can be found in online help for inContact WFO. Channel configuration settings can be found in the *inContact WFO Customer Guide to Passive VoIP Recording*. You must restart the Recorder service (cc_cticore.exe) after any Voice Board or channel changes.

Any other Voice Board changes should only be done under direct supervision from inContact WFO Support. Done incorrectly, Voice Board modifications can have serious negative impact to your system. In addition, altering the hardware configuration of your system may void your warranty.

Document Revision History

Revision	Change Description	Effective Date
0	Initial release	2015-04-30
1	Moved tasks for installing and registering ShoreWare Remote Server to customer guide.	2015-07-23
2	Updated to reflect integration with ShoreTel Connect.	2016-05-28