



MITEL APPLICATION NOTE

for

Date:

Recite Call Recording Application

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For use with:

Product:

System:

Mitel Connect ONSITE

Recite Call Recording

ST Connect 21.82.2142.0

Recite 3.0.3.9

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ShoreTel. Brilliantly simple business communications.	. 27

ShoreTel tests and validates the interoperability of the Member's solution with ShoreTel's published software interfaces. ShoreTel does not test, nor vouch for the Member's development and/or quality assurance process, nor the overall feature functionality of the Member's solution(s). ShoreTel does not test the Member's solution under load or assess the scalability of the Member's solution. It is the responsibility of the Member to ensure their solution is current with ShoreTel's published interfaces.

The ShoreTel Technical Support organization will provide Customers with support of ShoreTel's published software interfaces. This does not imply any support for the Member's solution directly. Customers or reseller partners will need to work directly with the Member to obtain support for their solution.

Introduction

This Configuration guide describes the steps required to integrate the Recite TAPI/Wav and Passive Call Recording Applications with a ShoreTel Connect Onsite System.

Recite Overview

Recite is the single most versatile unified communications recording solution for businesses and service providers, featuring over 300 customization options, a Windows 10-like tile dashboard, and enhanced Omni-channel playback. All advanced features are included at no extra charge and you have 100% control over how you experience your recordings and your agent/customer data. **Features**

- Automated recording system health monitoring Numonix Advisor proactively monitors the health of your system in real time to ensure zero down time
- Versatility RECITE recording solution offers 80 customizable widgets and dashboards, 100 replay permission levels, 8 recording modalities, 50 canned and modifiable reports, and 4 types of built-in storage support
- Omni-channel playback Our multimedia player offers the call audio, the agent's screen video, call details and online chat all in a single window for full interaction replay as it occurred
- RECITE Service Provider Edition Offers multi-tenancy with tenant-unique URL access, OPEX pricing, and storage to NAS, SAN, Microsoft Azure or Amazon Web Services.
- RECITE's PBX-hybrid functionality saves BPOs, service providers and multi-site contact centers money by enabling users to record multiple telephony environments from the same recorder.

Benefits

- With RECITE, companies can record precisely how they want to without being locked into rigid, pre-set parameters. This way, they can garner the specific customer intelligence they need enhance service levels, as well as compliance and dispute resolution capabilities.
- Clients **save money** when using RECITE over competitive solutions because most of our enhanced features (including quality monitoring) are included at no extra charge.
- As call recordings are critical to many business today, with RECITE, clients will know immediately if any issues exist with the recorder.
- Companies can easily integrate RECITE into their current contact center environment regardless of their existing equipment, locations, etc.

Contact Information

Numonix Technical Support	Numonix Sales	Technical Contact
+1-561-952-2600 opt 2	+1-561-952-2600	Evan Kahan
support.numonixrecording.com	Sales@numonixrecording.com	evan.kahan@numonixrecording.com

Configuration Overview

Network Topology



Test Environment

- ShoreTel Connect Onsite HQ and DVS Server
- Recite Configured to TAPI/WAV
- Recite configured for passive recording
- ShoreTel Voice Switch
- ShoreGear Switch
- ShoreTel 565 IP Phones
- ShoreTel 560 MGCP IP Phones
- ShoreTel 480G IP Phone
- ShoreTel Virtual Phone Switch
- ShoreTel Virtual Trunk Switch
- ST Connect Contact Center

Call Recording Requirements

- 1. Refer to the following list of the requirements for the Recite Server, to ensure the recording compatibility with the ShoreTel platform
- 2. Recite OS: 2012 R2 Standard or higher editions are supported
- 3. Windows 8.1 Pro, Windows 10 Pro are supported
- 4. Two (2) NIC ports are recommended on the Recite Server to separate data network, port spanned traffic and/or TAPI service when using Passive Recording. One adapter is required when using active TAPI-WAV recording
- 5. Microsoft SQL Server 2008, 2012, 2014, 2016 database applications are supported
- 6. Optional RAID 1, 5, or 10 configured internal hard drives, which is recommended for resiliency
- 7. ShoreTel TAPI Application License are required to communicate with the ShoreTel Server

TAPI/WAV SIP Trunk Recording

A direct copy of the audio is sent from the ShoreTel Switch to the Recite Server through a TAPI-WAV port. The ShoreTel TAPI client obtains all the call event data such as call start, call end, dialed digits, etc. The ShoreTel TAPI-WAV method records all the inbound and outbound calls at a ShoreTel Switch level, as a result station-to-station calls cannot be recorded.

TAPI-WAV provides an active (non-spanning) recording solution through active trunk-side recording. This recording method uses the ShoreTel TAPI-WAV ports to record phone calls. Each call desired to be recorded will be sent directly to the Recite Server.

Recording SIP trunks with TAPI/WAV requires SIP media proxy ports to be allocated on the ShoreTel Switches. One SIP media proxy port is required for each active call recording. Each trunk call can be monitored only one time, so 2N recording redundancy can only be supported with TAPI/WAV and another recording option such as port spanning.



NOTE: Station-to-station calls cannot be recorded using the TAPI/WAV method

Passive Recording with TAPI (port-mirroring/spanning)

The phone ports were "spanned or port mirrored" to a dedicated VLAN on the network where the Numonix Recite Recording application uses TAPI as the CTI connection point. The recording server was configured with a second NIC interface to capture the phone conversations.

The targeted or monitored phones only included MGCP standard IP phones. ShoreTel SIP phones conversations were capture only in conversation with a MGCP IP phone. Conversations captured included internal and external calls for both inbound and outbound calls.

Support for passive SIP-Trunk recording with CDR to avoid procurement of additional proxy ports which are not required when the trunk type is digital or analog.

The port spanning or mirroring method is ideal for networks requiring station-to-station recording. Using the correct network configuration, station-to-station calls can be recorded to verify critical voice communications or simply pinpoint inefficiencies.

NOTE: With the correct network configurations, the SPAN method can be used to record station- tostation calls. It will be the responsibility of the reseller and/or end user to configure the network to properly deliver the "spanned" packets to the Recite Server.



Special Notes

The following are the caveats and limitations of Recite with a ShoreTel Connect Onsite system. At this time, we are unable to provide additional information on a resolution of these limitations, but suggest to periodically refer to both ShoreTel Connect Onsite and Recite Software Release Notes for the updates, which can be found at the following location:

http://www.support.shoretel.com

http:/Numonixrecording.com

TAPI/WAV Call Recording

- Internal Calls like Station-to-Station calls cannot be recorded
- Call recordings are only available for external calls via trunk, either incoming or outgoing.

Passive Recording with TAPI

- The majority of the testing was performed with the media mirrored at the phone ports. Any monitored phone conversation was recorded regardless of the call feature invoked e.g. Conference, Find Me, etc.
- Office anywhere and Find Me calls were recorded when outbound external number is a DID of monitored phone.
- In the case of the ShoreTel Voice switch G729 codec testing, the mirroring was performed at the switch for this test. The phone(s) were always sending G711 by default regardless of the ordering given in the defined inter/intra codec listing for the switch site.
- SRTP Media Encryption currently not supported
- SIP phones were not tested as monitored phones as the application does not support Encryption with TAPI. However, they were tested in the calls with monitored phones.

ShoreTel License

A ShoreTel TAPI Application Server license is required for each Recite Server. One additional Real Time Adherence (RTA) Connection or Real Time Group Feed license is required to communicate with Recite for Enterprise Contact Center (ECC) agent ID integration

ShoreTel Switch Support

The following switch types were tested with Recite

- Virtual Trunk Switch
- ShoreTel Voice Switch

SIP Trunk Media Proxy

"SIP Media Proxy" is required for the Call Recoding over SIP Trunks. "SIP Media Proxy" is enabled by default on ShoreTel Virtual Trunk switches, but needs to be assigned manually on the new ShoreTel Voice Switches as well as for legacy half-width ShoreGear Switches. For further information on the "SIP Media Proxy", please refer to Chapter 19 of the ShoreTel Connect Onsite System Administration Guide.

NOTE: This Application Note assumes the setup, configuration and licensing of the Virtual/Physical Switches has already been completed. If you require additional information, please refer to the ShoreTel Connect Onsite Planning and Installation guide at the following location:

ShoreTel Server Configuration

This section outlines the steps to configure a ShoreTel system for the Recite ®.

Class of Service

1. Log in to the ShoreTel Connect Director with administrative rights at the following location:

http://<Director IP>/shorewaredirector

- Navigate to Administration → Users → Class of Service → Telephony Features Permission
- Select an existing class to modify or click NEW to create a new class. "Fully Featured" was used in this test effort.
- 4. Allow recording of own calls: Checked
- Go to Record other's calls and select checkbox Allow Initiation and radio button for Accept – All
- 6. All other settings should remain at default values
- 7. Click **SAVE**

Telephony Featu	res Permissions	NEW	COPY
Fully Featured		SAVE	RESET
GENERAL			
S Enumerate indiv	idually held calls for unpark		
Allow customiza	tion of IP phone buttons and client monitor windows		
Show extension	s with different prefixes in directory		
Allow collaborati	ion features		
Allow recording	of own calls		
Allow intersite vi	deo calls		
Allow call notes			
Show call histor	M .		
Allow upload of	, nersonal contacts to server		
Directed intercom:			
Allow Initiation			
Accept:			
	O None		
	All		
	Only From:		
Whisper paging:			
Allow Initiation			
Accept:			
	None		
	○ All		
Bargo in:	Only From:		
Allow Initiation			
Accept:			
Accept.	None		
	Only From:		
Record other's call	s:		
Allow Initiation			
Accept:			
	None		
	• All		
	Only From:		

User Group

Create a User Group for the Recite using the Class of Service created above:

- 1. Navigate to **Administration → Users → User Groups**
- 2. Click **NEW** to create a new user group or select an existing user group to modify. "Executives" was used in this test effort.
- 3. Assign the class of service created above by selecting it in the **COS Telephony** dropdown box. "Fully Featured" was used in this test effort.
- 4. Assign the **COS Call Permissions** to unrestricted by selecting "No Restrictions" in the dropdown menu
- 5. Assign the COS Voice Mail by selecting "No Mail Box" in the dropdown menu
- 6. Within the **Outgoing Trunk Groups (Access Code)** window, select the trunk groups with permissible to be recorded
- 7. All other settings can remain at default values
- 8. Click **SAVE**

User Groups							NEV	N COPY DELETE
Executives							SAV	E RESET CANCEL
GENERAL PROF	ILE							
Name:	Executives							
COS - Telephony:	Fully Featured 🗸 🗸	View Class of Service						
COS - Call Permissions:	No Restrictions	View Class of Service						
COS - Voice Mail:	No Mail Box 🗸 🗸	View Class of Service						
Send caller ID as caller's	emergency identification (CESID)							
Send DID as caller's eme	rgency identification (CESID)							
Account code collection mode	e: None V							
Show ShoreTel Connect of	client users a list of account codes	when dialing						
Voice mail interface mode:	None	\sim						
Music on hold:	<system default=""> V</system>							
Outgoing trunk groups (Acc	cess Code):							
Available:				_	Selected:			
NAME		TYPE \$	SITE	*	NAME 🗘	ACCESS CODE		≑ SITE ÷
AccessOne	9	SIP	Headquarters		ShoreTel SIP	9	SIP	Headquarters
Analog Loop Start	9	Analog Loop Start	Headquarters					
Digital Loop Start	9	Digital Loop Start	Headquarters					
Digital Wink Start	9	Digital Wink Start	Headquarters					

Application Server

Create a new application server for Recite to connect to the ShoreTel HQ Server:

- 1. Go to Administration → Appliances/Servers → Platform Equipment
- 2. Click NEW to create a new application server at the Headquarters site
- 3. Select ShoreGear soft switch
- 4. Enter Name and Description of the Recite Server
- 5. Enter the IP address and FQDN of the Recite Server

Platform Equipment									
ShoreGear Soft	Switch: Recite - 10	.64.3.80							
GENERAL	MUSIC ON HOLD	VOICE A	PPLICATION	CERT	IFICATE				
Name:	Rec	ite							
Description:	Rec	ite							
Site:	Hea	dquarters 🗸	Go to this site						
IP address:	10.6	4.3.80							
Fully qualified dor	nain name: 10.6	4.3.80			REFRESH				
Proxy server URL									
Enable local d	atabase								
Use database on	server: Hea	dquarters 🗸							

- 6. Uncheck the checkbox Allow Voice Mailboxes
- 7. Select the "Executives" User Group modified above in the User Group dropdown menu
- 8. All other settings can remain at default values
- 9. Click SAVE

Platform Equipment						
ShoreGear SoftSwitch: Recite	e - 10.64.3.80					
GENERAL MUSIC ON H	OLD VOICE APPLICATION CERTIFICATE					
Allow voice mailboxes						
Account code local extension:						
Voice mail extension:	152					
Voice mail login extension:	153					
Auto-attendant extension:	154					
Default auto-attendant menu:						
User group:	Executives 🗸					
Maximum trunks for voice mail notification:	10 (1-254)					
Voice mail interface mode:	<none></none>					

TAPI/WAV Configuration

When using the TAPI/WAV recording option, the following additional configuration steps are required:

- 1. Create the Recite Route Point
- 2. Go to Administration → Features → Call Control → Route Points
- 3. Click **NEW** to create a new Route Point
- 4. Enter the Name for a Route Point
- 5. Enter the Extension value or use the auto-assigned number
- 6. Set the Call Stack Depth value to 200
- 7. Select the user group created previously in the **User Group** dropdown menu. "Executives" was used for this testing.
- 8. In the Server dropdown menu, select the Call Recording Server created previously
- 9. Uncheck Enable mailbox checkbox

Route Points	NEW
Recite Route point	
GENERAL ROUTING	VOICE MAIL DNIS
Name:	Recite Route point
Extension:	130 SHOW REFERENCES
DID Settings:	(not configured)) change settings
Include in System Dial by Name Make extension private Fax redirect	directory
Call stack depth:	200
User group:	Executives View user group
Server:	Recite - Recite Select Contact Center server to route calls to ECC server for IVR/IRN event route points
Language:	English(US)
Enable mailbox	
Mailbox server:	Headquarters
Voicemail password:	(4 - 26 characters)

- 10. Select the Routing tab
- 11. Select "Never" for the **Call forward** option
- 12. Leave all other settings at default values
- 13. Click SAVE

oute Points			
cite Route point			
GENERAL	ROUTING	VOICE MAIL	DNIS
ON-HOURS	OFF-HOURS	HOLIDAY	CUSTOM
Schedule:	<	None> 🗸 Viev	v schedule
Call forward:			
	0	Always	
	0	No Answer/Busy	
	۲	Never	
Always:		101 : Voice Mail	
Busy:		101 : Voice Mail	
No answer:		101 : Voice Mail	
Forward after		4 rings	
Escalation profile		<none></none>	
Recorded name:			
PLAY ►	RECORD •	IMPORT †	PREFERENCES *
]
Assistant:			
Enable messa	ge notification		

Recite Configuration

This section describes the steps to configure the Recite with ShoreTel Connect Onsite system using TAPI/Wav and Passive recording.

Install the ShoreTel Remote Server

ShoreTel remote Server Software must be installed since it provides a TAPI interface for the recorder which is used for recording audio and gathering call details.

Change the Computer name to some variation which is appropriate.

The computer name is used for security purposes by the ShoreTel software. It cannot be changed after the ShoreTel Remote Server software has been installed. Restart the server.

Set a static IP address for the server. This will allow the ShoreTel HQ server to reliably find the Remote server.

Follow the ShoreTel installation guide to add the Application and Web Server roles. Where the ShoreTel installation notes describe selecting FTP publishing Service this has been built into the Web Server role and is Available to select under FTP server. Select all FTP server options.

SMTP

Add SMTP as a server feature as noted in the ShoreTel installation notes. Note: the FTP service is listed in the Service window as "Microsoft FTP Service"

Setup CTI Management

Navigate to

- 1. C:\Program Files (x86)\Numonix\Recite\CTILink
- 2. Open the CTILinkService.app.config file in a text viewer.
- 3. Locate the Links as mentioned below.

<Link001> <LinkName Value="SHORETEL" /> <LinkType Value="SHORETEL" /> <Address Value="XXX.XXX.XXX.XXX" /> <Port Value="9500" /> <KeepAliveInterval Value="30" /> <MessageParser>

```
<MapID Value="0" />
       <MapDescription Value="" />
       <Plugins>
        <TypeName Value="" />
        <AssemblyPath Value="" />
       </Plugins>
      </MessageParser>
      <LinkDevicePort Value="9200" />
      <IPAddressFilters Value="LOCAL,REMOTE" />
      <UserID Value="" />
      <UserName Value="" />
      <PayloadTypes Value="PCMU,PCMA,RTA NB" />
      <LinkExtension>
       <Plugins>
         <TypeName Value="" />
        <AssemblyPath Value="" />
       </Plugins>
      </LinkExtension>
      <MediaCaptureTypes Value="AUDIO,CHAT,VIDEO,SCREEN" />
      <EnableCustomEventTriggers Value="false" />
      <EnablePacketTracker Value="true" />
      <EnableNATMapping Value="false" />
      <IPMonitorServiceID Value="IPM1" />
      <AsyncCommandProvider>
       <MinInvokeID Value="0" />
       <MaxInvokeID Value="4000" />
       <MaxConcurrentCommandOperations Value="3" />
       <CommandOperationTimeout Value="5" />
       <CommandOperationRetryCount Value="2" />
      </AsyncCommandProvider>
      <RemotePartyHeaderName Value="Remote-Party-ID:" />
      <AllowSipMethods Value="INVITE, BYE, ACK, PRACK, CANCEL, INFO, UPDATE, REFER,
NOTIFY, OPTIONS, SUBSCRIBE, REGISTER, MESSAGE" />
      <EnableHoldPending Value="false" />
      <UserPassword Value="" />
      <ApplicationInstanceID Value="" />
      <Priority Value="1" />
      <MessageCredentialType Value="Windows" />
      <PlainTextPassword Value="" />
      <EnableTargetActivationTimer Value="true" />
      <EnableAutoStopReplacedCalls Value="false" />
     </Link001>
```

Mitel. Powering connections.

Configure the Configuration Server

- 1. Go to settings → Configuration server
- 2. Click **NEW** to create a new configuration server
- 3. Enter Name and IP Address
- 4. Click Save

Quality Control 🆋 Report	ts <u>Iul</u>		Calls 0	Logged in as	: Numonix Admin
Configuration Server	r Detail				×
lp Address*	127.0.0.1	Machine Name*			
Friendly Name*	This Machine	Setup Completed	Uncheck to restart th server	ne setup process	for this
Created on	7/19/2017 9:46:01 AM	Modified on	7/19/2017 9:46:01 AM	by Numonix Num	nonix.
	Save				

Configuring the Extensions

- 1. Navigate to **Settings** \rightarrow **Extensions**
- 2. Select an existing Extension to modify or click **Add Extension** to create a new extensions
- 3. Enter Extension number of the ShoreTel phone configured in ShoreTel Switch.
- 4. Select Connection type as Dynamic
- 5. All other settings should remain at default values
- 6. Click SAVE

Quality Control 🧪 Repor	ts 📶		Calls 🕕	Logged in as: <i>I</i> QCs (1)	Numonix	k Admiri Ratio
Extension Detail						×
Extension Number*	112	Extension Type	STATION			•
Physical Device ID		Physical Device Type	STATION			•
Link ID		Description	user1 sonus: Lab109- 172.16.31.104 - 112	ST100DA, IP Pho	ne:	
Allocated User	Unallocated	Status	Active			•
Connection Type		Restricted	Calls for extension ca	nnot be accessed	l withou	t
Server	127.0.0.1:7500	Connection	password	CCESS'		
Created on	7/21/2017 7:12:51 AM	Modified on	7/21/2017 7:12:51 AM b	y Numonix Admin	-	
	Save Cancel					

Call Records Listings

Call listings will show all the calls which are recorded by application

- 1. Go to calls → Call Listings
- 2. Enter Filter details to search From and To
- 3. Click Search to show results

REC ITE"	Calls 📞	Quality	Control 🥓							Calls 🕕	Logged in as: <i>Na</i> QCs 1	umonix Admin
Filter Calls	-i	Call Li	sting						Search by Catalog	Index Q		i 📰 🗆
From 8/8/2017 12:00 AM	_	Drag a co	lumn header and	drop it here to group by that colu	ımn							
То			Secure 7	Start Time 7	Duration T	Direction	Flag Extension 7	Agent	T Caller Number	Caller Name	T Dialed Num	ber 🍸 ACD Î
11/1/2017 11:59 PM			<u> </u>	8/30/2017 3:18:28 PM	0m 37s	In	157	Unknown	+12142425955	Richard Moreno	158	
Filter			a	8/30/2017 3:18:28 PM	0m 35s	Out	158	Unknown	Unknown			
			a	8/30/2017 3:17:48 PM	0m 33s	Out	157	Unknown	+12142425955	Richard Moreno	158	
			a	8/30/2017 3:17:48 PM	0m 33s	In	158	Unknown	+12142425955	Richard Moreno	158	
				8/30/2017 3:16:57 PM	0m 39s	Out	158	Unknown	Unknown			
Existing Filters	- 11		a	8/30/2017 3:16:33 PM	0m 2s	Out	158	Unknown	158	test User4	145	
* Show Matched Calls	(True)		a	8/30/2017 2:47:22 PM	0m 44s	In	157	Unknown	+12142425955	Richard Moreno	158	
X Show Unmatched Ca	alls (True	-	a	8/30/2017 2:47:21 PM	0m 44s	Out	158	Unknown	Unknown			
4	- •	Call D	etails 2500	0000000569								
Reset Save S	Search			Extension: 157	017 0.10.00	00	1.15/00.27			Volume	e Ba	alance
Saved Searches				Duration: 0m 37	2017 3:18:28 's		1	1 dia				
				Agent: Unkno	own			· · · · ·	↓ ↓ ₩<u></u>↓ ₩			• • ••
				Number: +1214	2425955				"" "		ा या हुए	
				Call	Details	(00					ENCRYPTED
Run S	Search	Showing	1 through 100	of 404			R (1 2	3 4 5 🕟	н		Search	took 0.8 seconds

ShoreTel Connect Client

The ShoreTel Connect Client application allows a user to answer their phone via a soft client interface on their PC. It has two main modes of operation:

- Primary phone-In this mode the soft client will answer the phone but the audio will still be
 presented on the physical phone via a handset or headset etc. In this mode the recorder will
 record the audio present on the physical ShoreTel phone.
- Soft phone- In this mode the soft client will answer the phone and the audio will be present on the client PC's sound card. In this mode the recorder will record the audio present on the PC sound card.

Summary of Tests and Results

N/S = Not Supported N/T= Not Tested N/A= Not Applicable

Recite TAPI/WAV Call Recording

Primary Switch Test Plan (ShoreTel Virtual Trunk Switch)

ID	Result	Name	Description	Notes
1.1	PASS	Setup and Initialization	Verify successful setup and initialization of the Call Recording solution	
1.2	PASS	Outbound External Call	Verify outbound calls are recorded	
1.3	PASS	Inbound External Call	Verify calls received by the SUT are recorded	
1.4	PASS	Call Hold with MOH	Verify the two calls (pre-Hold and post-Hold) are properly recorded and retrievable on the server.	
1.5	PASS	Blind Transfer	Verify both call legs are properly recorded and retrievable on the server.	
1.6	PASS	Consultative (Attended) Transfer	Verify both call legs are properly recorded and retrievable on the server.	
1.7	PASS	Blind Conference Calls	Verify the media for all three parties is properly recorded and retrievable on the server.	
1.8	PASS	Consultative Conference Calls	Verify the media for all three parties is properly recorded and retrievable on the server.	
1.9	PASS	Make Me Conference Calls – 4 party conference	Verify the media for all four parties is properly recorded and retrievable on the server.	
1.10	PASS	Inbound External Call – Silent Monitor	Verify call is properly recorded and silent monitor works properly.	
1.11	PASS	Office Anywhere Call	Verify OAE call is properly recorded and retrievable on the server.	

ID	Result	Name	Description	Notes
1.12	PASS	Inbound Call to Voice Mail and trigger Find Me	Verify call is properly recorded and retrievable on the server.	
1.13	PASS	Inbound Call to ECC Agent	Verify call to Agent is properly recorded and retrievable on the server.	
1.14	PASS	Conference	Verify call is properly recorded and retrievable on the server.	
1.15	PASS	Inbound / Outbound G.711 Calls	Verify call is properly recorded and retrievable on the server.	
1.16	PASS	Inbound / Outbound G.729 Calls	Verify call is properly recorded and retrievable on the server.	

Secondary Switch Test Plan (ShoreTel Voice Switch)

ID	Result	Name	Description	Notes	
1.1	PASS	Setup and Initialization	Verify successful setup and initialization of the Call Recording solution		
1.2	PASS	Outbound External Call	Verify calls outbound calls are recorded		
1.3	PASS	Inbound External Call	Verify calls received by the SUT are recorded		
1.4	PASS	Call Hold with MOH	Verify the two calls (pre-Hold and post-Hold) are properly recorded and retrievable on the server.		
1.5	PASS	Blind Transfer	Verify both call legs are properly recorded and retrievable on the server.		
1.6	PASS	Consultative (Attended) Transfer	Verify both call legs are properly recorded and retrievable on the server.		
1.7	PASS	Blind Conference Calls	Verify the media for all three parties is properly recorded and retrievable on the server.		

ID	Result	Name	Description	Notes
1.8	PASS	Consultative Conference Calls	Verify the media for all three parties is properly recorded and retrievable on the server.	
1.9	PASS	Make Me Conference Calls – 4 party conference	Verify the media for all four parties is properly recorded and retrievable on the server.	
1.10	PASS	Inbound External Call – Silent Monitor	Verify call is properly recorded and silent monitor works properly.	
1.11	PASS	Office Anywhere Call	Verify OAE call is properly recorded and retrievable on the server.	
1.12	PASS	Inbound Call to Voice Mail and trigger Find Me	Verify call is properly recorded and retrievable on the server.	
1.13	PASS	Inbound Call to ECC Agent	Verify call to Agent is properly recorded and retrievable on the server.	
1.14	PASS	Conference	Verify call is properly recorded and retrievable on the server.	
1.15	PASS	Inbound / Outbound G.711 Calls	Verify call is properly recorded and retrievable on the server.	
1.16	PASS	Inbound / Outbound G.729 Calls	Verify call is properly recorded and retrievable on the server.	

Passive Recording with TAPI

Switch Test Plan (ShoreTel Virtual Phone Switch)

ID	Result	Name	Description	Notes
1.1	PASS	Setup and Initialization	Verify successful setup and initialization of the Call Recording solution	
1.2	PASS	Outbound Internal Call	Verify calls outbound calls are recorded	
1.3	PASS	Inbound Internal Call	Verify calls received by the SUT are recorded	
1.4	PASS	Call Hold with MOH - Internal	Verify the two calls (pre-Hold and post-Hold) are properly recorded and retrievable on the server.	
1.5	PASS	Blind Transfer – Internal	Verify both calls legs are properly recorded and retrievable on the server.	
1.6	PASS	Consultative (Attended) Transfer - Internal	Verify both calls legs are properly recorded and retrievable on the server.	
1.7	PASS	Blind Conference Calls - Internal	Verify the media for all three parties is properly recorded and retrievable on the server.	
1.8	PASS	Outbound External Call	Verify calls outbound calls are recorded	
1.9	PASS	Inbound External Call	Verify calls received by the SUT are recorded	
1.10	PASS	Call Hold with MOH - External	Verify the two calls (pre-Hold and post-Hold) are properly recorded and retrievable on the server.	
1.11	PASS	Blind Transfer – External	Verify both calls legs are properly recorded and retrievable on the server.	
1.12	PASS	Consultative (Attended) External Transfer	Verify both calls legs are properly recorded and retrievable on the server.	

ID	Result	Name	Description	Notes	
1.13	PASS	Conference	Verify the media for all three parties is properly recorded and retrievable on the server		
1.14	PASS	Consultative Conference Calls	Verify the media for all three parties is properly recorded and retrievable on the server		
1.15	PASS	Make Me Conference Calls – 4 party conference	Verify the media for all four parties is properly recorded and retrievable on the server		
1.16	PASS	Inbound External Call – Silent Monitor	Verify call is properly recorded and silent monitor works properly		
1.17	PASS	Office Anywhere Call	Verify OAE call is properly recorded and retrievable on the server		
1.18	PASS	Inbound Call to Voice Mail and trigger Find Me	Verify call is properly recorded and retrievable on the server		
1.19	PASS	Inbound Call to ECC Agent	Verify call to Agent is properly recorded and retrievable on the server		
1.20	PASS	Inbound / Outbound G.711 Calls	Verify call is properly recorded and retrievable on the server		
1.21	PASS	Inbound / Outbound G.729 Calls	Verify call is properly recorded and retrievable on the server		

Switch Test Plan (ShoreTel Voice Switch)

ID	Result	Name	Description	Notes
1.1	PASS	Setup and Initialization	Verify successful setup and initialization of the Call Recording solution	
1.2	PASS	Outbound Internal Call	Verify calls outbound calls are recorded	
1.3	PASS	Inbound Internal Call	Verify calls received by the SUT are recorded	
1.4	PASS	Call Hold with MOH - Internal	Verify the two calls (pre-Hold and post-Hold) are properly recorded and retrievable on the server	
1.5	PASS	Blind Transfer – Internal	Verify both calls legs are properly recorded and retrievable on the server	
1.6	PASS	Consultative (Attended) Transfer - Internal	Verify both calls legs are properly recorded and retrievable on the server	
1.7	PASS	Blind Conference Calls - Internal	Verify the media for all three parties is properly recorded and retrievable on the server	
1.8	PASS	Outbound External Call	Verify calls outbound calls are recorded	
1.9	PASS	Inbound External Call	Verify calls received by the SUT are recorded	
1.10	PASS	Call Hold with MOH - External	Verify the two calls (pre-Hold and post-Hold) are properly recorded and retrievable on the server	
1.11	PASS	Blind Transfer – External	Verify both calls legs are properly recorded and retrievable on the server	
1.12	PASS	Consultative (Attended) External Transfer	Verify both calls legs are properly recorded and retrievable on the server	
1.13	PASS	Conference	Verify the media for all three parties is properly recorded and retrievable on the server	

ID	Result	Name	Description	Notes
1.14	PASS	Consultative Conference Calls	Verify the media for all three parties is properly recorded and retrievable on the server	
1.15	PASS	Make Me Conference Calls – 4 party conference	Verify the media for all four s parties is properly recorded and retrievable on the server	
1.16	PASS	Inbound External Call – Silent Monitor	Verify call is properly recorded and silent monitor works properly	
1.17	PASS	Office Anywhere Call	Verify OAE call is properly recorded and retrievable on the server	
1.18	PASS	Inbound Call to Voice Mail and trigger Find Me	Verify call is properly recorded and retrievable on the server	
1.19	PASS	Inbound Call to ECC Agent	Verify call to Agent is properly recorded and retrievable on the server	
1.20	PASS	Inbound / Outbound G.711 Calls	Verify call is properly recorded and retrievable on the server	
1.21	PASS	Inbound / Outbound G.729 Calls	Verify call is properly recorded and retrievable on the server	

Conclusion

Recite Call Recording Solution – TAPI/WAV and Passive Recorder with TAPI has been successfully validated and approved with ShoreTel Connect Onsite system

Additional Resources

ShoreTel Connect ONSITE System Administration Guide

ShoreTel Connect ONSITE Planning and Installation Guide

ShoreTel Connect ONSITE Client User Guide

Version	Date	Contributor	Content
1.0	Sept 2017	Pradeep Nagubandi	Original App Note
1.1	Nov 2017	Pradeep Nagubandi	ShoreTel requested revisions

ShoreTel. Brilliantly simple business communications.

ShoreTel, Inc. (NASDAQ: SHOR) is a leading provider of brilliantly simple IP phone systems and unified communications solutions powering today's always-on workforce. Its flexible communications solutions for on-premises, cloud and hybrid environments eliminate complexity, reduce costs and improve productivity.

World Headquarters 960 Stewart Drive Sunnyvale, CA 94085 USA shoretel.com +1 (800) 425-9385 Toll Free +1 (408) 331-3300 Tel +1 (408) 331-3333 Fax EMEA Inspired Easthampstead Road Bracknell, RG12 1YQ +44 (0) 1344 208800 Tel APAC 8 Temasek Boulevard#41-03 Suntec Tower 3 Singapore 038988 +65 6517 0800 Tel

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