



Application Note

LifeSize® Video Communications System and ShoreTel IP Phone System

This application note provides the details for integrating a LifeSize video communications system with the ShoreTel IP phone system. This application note requires the use of ShoreTel v8.x, which supports the integration of LifeSize components as SIP extensions.

For the purposes of this application note, a LifeSize video communications system consists of the following components:

- LifeSize codec
- LifeSize camera
- Audio I/O device, such as LifeSize Phone, LifeSize MicPod, or ShoreTel IP 8000

LifeSize cameras and audio devices are connected to the LifeSize codec. All communication between the ShoreTel system and the LifeSize system occurs through the LifeSize codec. All configuration of LifeSize system components occurs on the LifeSize codec.

Use of LifeSize equipment and software components are governed by the conditions and terms of the LifeSize Communications End User License Agreement.

Requirements

The following requirements apply to this application note:

- LifeSize video communications system v3.5 or later
- ShoreWare Server Software v8.x. (Versions prior to 8.0 do not support SIP extensions.)
- ShoreWare SIP phone licenses

Limitations

- ShoreTel systems do not pass along any INFO messages from the LifeSize video communications system.
- ShoreTel systems do not pass along the Remote Mute Status of the LifeSize video communications system.

Configuration Overview

The following general steps are required to integrate a LifeSize video communications system with the ShoreTel IP phone system:

1. Using ShoreWare Director, configure the ShoreTel system as described in the next sections.
2. Using your web browser, register the LifeSize video communications system with the ShoreTel SIP server.

Notes for Users Upgrading from a Previous ShoreTel Version

If you upgraded from a previous ShoreTel version, a certain parameter may be visible in the **Call Control** options. You must disable this parameter in order to properly configure the SIP extension. To check for this parameter, follow these steps:

1. Using ShoreWare Director, navigate to **Administration**→**Call Control**→**Options**.
The **Call/Control Options** screen appears.
2. If the **Always Use Port 5004 for RTP** parameter is visible, disable the parameter.
3. Click **Save** to apply the change.
4. Restart the ShoreTel system in this order: restart all servers, then all ShoreGear switches, and then all IP phones.

If you are upgrading from a pre-8.0 version of ShoreWare and you configured the system to integrate a LifeSize device in a SIP Trunk environment, follow the next steps. Otherwise, proceed to the "ShoreTel System Configuration" section.

1. Using ShoreWare Director, navigate to **Administration**→**Trunks...**→**Individual Trunks**.
2. Delete all of the individual trunks that are currently in use by the LifeSize video communications system.
3. If you plan to use the extension number currently assigned to the LifeSize system, navigate to **Administration**→**Trunks...**→**Trunk Groups**, select the trunk group for the LifeSize system, and edit the **Off System Extensions** range to either delete the extension number or exclude the number.

If you do not plan to use the SIP trunk group any longer, you may delete it. However, if any user groups are currently using the trunk group, you must first remove access to that trunk group before you can delete it.

ShoreTel System Configuration

This section describes how to:

- Create a SIP Profile for the LifeSize video communications system.
- Create a Codec List for the LifeSize video communications system.
- Configure a Switch port to act as a SIP proxy.
- Configure the Site to use high-bandwidth codecs.
- Create a SIP Individual User extension for the LifeSize video communications system.

Creating a SIP Profile

1. Using ShoreWare Director, navigate to **Administration**→**Call Control**→**SIP Profiles**.

The **SIP Profiles** screen appears.

2. Click **New** to create a new SIP profile.
3. Provide input for the following parameters:

Name—Enter an appropriate name, such as LifeSize.

User Agent—Enter the following:

```
LifeSize.*
```

Priority—Set this to 100.

Enable—Check this box.

Custom Parameters—Enter the following:

```
1CodecAnswer=0
```

4. Click **New** to create the new profile.

Creating a Codec List

1. Using ShoreWare Director, navigate to **Administration**→**Call Control**→**Codec Lists**.

The **Codec Lists** screen appears.

2. Click **New** to create a new codec list.
3. Provide input for the following parameters:

Name—Enter an appropriate name, such as LS_codecs. You will use this name later when you configure the ShoreTel site.

Codec List Members—Select the AAC_LC/32000 codec and click **Move Up** until the codec is at the top of the list.

4. Click **New** to create the new codec list.

Configuring the Switch Port

1. Using ShoreWare Director, navigate to **Administration**→**Switches**.

The **Switches** screen appears.

2. Select the switch you want to use to connect to the LifeSize video communications system.

The **Edit Switch** screen appears.

3. Find the port you want to use and set the **Port Type** to 100 SIP Proxy.

If your installation requires more than 100 SIP extensions, configure more ports as necessary. For example, two ports each set to 100 SIP Proxy provides 200 SIP extensions.

Alternatively, if the switch you selected has **Built-in Capacity** for SIP trunks, you can set aside a number of ports for SIP extensions. Every 5 ports assigned to SIP trunks provides 100 SIP extensions. For example, a single ShoreGear 120 switch with all ports assigned to SIP trunks can provide 2400 SIP extensions.

4. Click **Save** to apply the change.

Configuring the Site

1. Using ShoreWare Director, navigate to **Administration**→**Sites**.

The **Sites** screen appears.

2. Select the site you want to configure.

The **Edit Site** screen appears.

3. In the **SIP Proxy** area, ensure that the following parameters are set:

Virtual IP Address—Designate the static IP address that can be used as a SIP proxy for the site in case of failure. If you do not set a Virtual IP Address, you can define only one proxy switch.

Proxy Switch 1—Select a switch to serve as SIP proxy if the current site fails. Switches are available for selection only if proxy resources are enabled on the switch.

Proxy Switch 2—Select a switch to serve as SIP proxy if the Proxy Switch 1 fails.

4. In the **Bandwidth** area, ensure that the following parameters are set:

Admission Control Bandwidth—Defines the bandwidth to and from the site. This parameter is important because SIP devices may be counted against the site bandwidth. For more information, refer to the *ShoreTel Planning and Installation Guide*.

Intra-Site Calls—Enter the codec list name you defined in the “Creating a Codec List” section.

Inter-Site Calls—Enter the codec list name you defined in the “Creating a Codec List” section.

5. Click **Save** to apply the changes.

Creating a SIP Individual User Extension

Follow these steps to create a user extension for the LifeSize video communications system:

1. Using ShoreWare Director, navigate to **Administration**→**Users...**→**Individual Users**.
The **Individual Users** screen appears.
2. In the **Add new user at site** field, select the site you want to use and click **Go**.
The **Edit User** screen appears.
3. Provide input for the following parameters:
 - First Name**—Provide an appropriate name, such as LifeSize_Conference_Room. You will use this name later when you register the LifeSize video communications system with the ShoreTel SIP server.
 - Number**—ShoreWare Director automatically assigns a number, which you can modify to any appropriate extension. You will use this number later when you register the LifeSize video communications system with the ShoreTel SIP server.
 - License Type**—Select the type of license.
 - User Group**—Select an appropriate user group.
 - Home Port**—Select **IP Phones** and **Any IP Phone**.
4. Click **Save** to save these changes, then scroll down to the **SIP Password** section of the screen.
By default, there is no password assigned, but the field is masked to give the appearance of a password.
5. Enter a **SIP Password**. You will use this password later when you register the LifeSize video communications system with the ShoreTel SIP server.
6. Click **Save** to save the password.

Note for Users Installing the LifeSize Video Communications System at a Remote Site

If you are installing the LifeSize video communications system at a remote site, you must perform the following additional steps:

1. Using ShoreWare Director, navigate to **Administration**→**IP Phones...**→**IP Address Phone Map**.
The **IP Address Phone Map** screen appears.
2. Click **New...** and create an entry for the desired remote site, using the IP address of the LifeSize codec.
3. Click **Save** to apply your changes.

LifeSize Video Communications System Registration

This section describes the steps necessary to register the LifeSize video communications system with the ShoreTel SIP server. For general information about installing and configuring the LifeSize video communications system, refer to the LifeSize system documentation available on the LifeSize product CD or from the Support page of www.lifesize.com.

Registering with the SIP Server

1. Using your web browser, access the LifeSize codec and navigate to **Preferences**→**SIP**→**Server**.

The **SIP Server** screen appears.

2. Set the following parameters:

SIP Username—Enter the **First Name** you defined in the “Creating a SIP Individual User Extension” section.

Authorization Name—Enter the **Extension** you defined in the “Creating a SIP Individual User Extension” section.

Authorization Password—Enter the **SIP Password** you defined in the “Creating a SIP Individual User Extension” section.

SIP Proxy—Disable this parameter.

SIP Registrar—Enable this parameter.

Registrar Hostname—Enter the IP address of the ShoreTel switch with which the LifeSize codec will register. This is either the **Virtual IP Address** you defined in the “Configuring the Site” section or the IP address of the ShoreGear switch port that has **100 SIP Proxy** enabled.

Registrar Port—Set this to 5060.

3. Click **Save Changes** to apply these changes.

Verifying Registration

To verify that the LifeSize codec was registered, follow these steps:

1. In ShoreWare Director, navigate to **Administration**→**IP Phones**→**Individual IP Phones**.
2. Find the LifeSize codec in the list.

Note that the ShoreTel system automatically generates SIP phone names. The **Name** contains the prefix “SIP” and reflects the current port assigned to the LifeSize codec. The **Current User** reflects the **First Name** you defined in the “Creating a SIP Individual User Extension” section.

Customer Support

LifeSize Communications welcomes your comments regarding our products and services. If you have feedback about this or any LifeSize product, please send it to feedback@lifesize.com. You may also contact LifeSize Customer Support as follows:

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