# *LifeSize® Control™ Installation Guide*

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| *Method* | *Address* |
|---|---|
| Internet | http://www.lifesize.com |
| E-mail | support@lifesize.com |
| Phone | (877) LIFESIZE or (877) 543-3749<br>(512) 347-9300 |
| Fax | (512) 347-9301 |

# Welcome to LifeSize® Control™

LifeSize Control is a comprehensive management software solution for network administrators who manage video and voice communications systems in an IP environment. LifeSize Control enables you to monitor, schedule, manage, and report on your multi-vendor video communications network from a single console using a web browser.

LifeSize Control includes:

- Full featured, standards-based video device management capabilities with real-time status and event notification
- Support for devices from LifeSize and third party vendors. Refer to the Release Notes on the Support page of www.lifesize.com for a list of third party devices that are supported with LifeSize Control.
- Conference scheduling integration with Microsoft Exchange/Outlook
- Report generation for collected performance data
- Central management of upgrades and maintenance

This guide explains how to install LifeSize Control. Related documentation including Release Notes is available from the Support page of www.lifesize.com.

# Upgrading from a Previous Release

This release of LifeSize Control supports upgrades from version 3.x. Before continuing, refer to “Upgrading LifeSize Control” on page 16 for important information about upgrade prerequisites. To upgrade from a version earlier than 3.0, contact LifeSize Customer Support for assistance.

# Preparing to Install

Before you install LifeSize Control, ensure that your system meets the following requirements.

## Hardware

LifeSize Control supports the following minimum server configuration:

- 2.4GHz Pentium 4 processor
- 1GB RAM
- At least 500MB of free hard disk drive space (LifeSize recommends 4GB)

  ***Note:*** Dual NIC cards are not supported on the LifeSize Control server.

## Software

Ensure that the following software is installed on the server before you install LifeSize Control:

- Microsoft Windows Server 2003 with Service Pack 1 (minimum) or Service Pack 2 (recommended).
- You must install and activate the following Windows components on the server. Refer to “Installing Windows Components” on page 7 for information about installing these components:
  - Application Server Console
  - ASP.NET
  - Enable Network COM+ Access
  - Enable Network DTC Access
  - Internet Information Server (IIS) v6.0 or later
- If you intend to use SSL to access LifeSize Control from a web client, ensure that you obtain a valid server certificate.

LifeSize Control is not supported on a server with an Active Directory installation or that is a domain controller. Ensure that Active Directory is not installed on the server on which you intend to install LifeSize Control and that the server is not a domain controller.

The LifeSize Control installation program installs an OpenLDAP server, the Microsoft .NET Framework 2.0 if not already installed, and PostgreSQL v8.3. You must be logged in as a user with administrator privileges to install these programs. Before you run the installation program, ensure that the following prerequisites are met on the computer on which you intend to install LifeSize Control:

- You have administrator rights to install the applications.
- An existing OpenLDAP installation does not exist.
- An existing PostgreSQL installation does not exist.
- If OpenSSL exists on the server, ensure that the version is 0.9.7 or later or delete the LIBEAY32.dll and SSLEAY32.dll files (located in the `C:\windows\system32` folder). The LifeSize Control installation program installs a compatible version of these files if OpenSSL does not exist on the server. If the LifeSize Control installation program detects an earlier version, an error message appears indicating that you must delete the LIBEAY32.dll and SSLEAY32.dll files. When you click **OK** in the message dialog and then click **Next** in the installation dialog, the installation program quits. You must then

delete the LIBEAY32.dll and SSLEAY32.dll files and uninstall LifeSize Control before running the LifeSize Control installation program again. To uninstall LifeSize Control, refer to “Removing LifeSize Control” on page 19.

***Caution:*** If you are performing an upgrade and the LifeSize Control installation program encounters an incompatible existing version of OpenSSL, uninstalling LifeSize Control removes the installation. You cannot continue the upgrade or return your existing LifeSize Control installation to its previous state without uninstalling LifeSize Control, reinstalling the previous version and restoring its database from a backup. If you are planning to upgrade your LifeSize Control installation, ensure that you check for an existing OpenSSL installation before performing the upgrade. For more information about upgrade prerequisites, refer to “Upgrading LifeSize Control” on page 16.

## Client Support

You can access the LifeSize Control user interface from a computer equipped with the following:

- A supported web browser (refer to the Release Notes at www.lifesize.com/support)
- 256MB memory
- Adobe Flash Player (refer to the Release Notes at www.lifesize.com/support for supported versions)

## Ports

The LifeSize Control installation program automatically installs and prompts you to configure an OpenLDAP server. The OpenLDAP server installs on the same server as the LifeSize Control software and uses port 389 by default. You can accept the default port if not already in use, or specify a different port for the server to use. Ensure that any firewalls that are installed on the LifeSize Control server are configured to allow incoming traffic on this port.

LifeSize Control is based on Microsoft’s .NET framework and uses port 8085 for IIS to LifeSize Communications’ server communication.

LifeSize Control uses port 3336 when scheduling conferences through Radvision and LifeSize MCUs.

The user interface is hosted on IIS on a Windows 2003 platform on port 80, or port 443 if the SSL option is used. Dynamic updates are provided through port 4296 of the web server.

LifeSize Control supports management of video communications devices through standard APIs such as those listed in the following table. Communication with these devices is through default ports provided for FTP, SNMP, and HTTP.

| Protocol | Ports |
|---|---|
| FTP | port 21 for outbound communication from LifeSize Control to Codian, Tandberg, and Polycom devices |
| Telnet | port 23 for outbound communication from LifeSize Control to Tandberg devices<br>port 24 for outbound communication from LifeSize Control to Polycom devices |
| SSH | port 22 outbound communication from LifeSize Control |
| SNMP v1, v3 | port 161 for inbound communication<br>LifeSize Control connects to this port on a device to retrieve data from the device.<br>port 162<br>LifeSize Control listens on this port to receive traps from a device. When the device needs to forward a trap, it connects to the LifeSize Control server on this port to deliver the trap.<br>port 162 for outbound communication, if trap forwarding is enabled<br>If northbound communication is enabled for alarm forwarding, LifeSize Control connects to this port of the northbound IP address to forward the trap. |
| HTTP | port 80 |
| HTTPS | port 443 |
| LDAP | port 389 for OpenLDAP (unless changed during installation) for inbound communication from LifeSize devices to the LifeSize Control server |

### Data Storage

LifeSize Control stores data in the PostgreSQL database management system. The installation program installs PostgreSQL on the same server as LifeSize Control.

A database instance is created using Trusted Windows Authentication. The connection mechanism uses the PostgreSQL Data Provider. LifeSize Control uses an LDAP based H.350 compliant address book.

## Installing LifeSize Control

Installing LifeSize Control includes the following tasks:

- Install Microsoft Windows components.
- Run the LifeSize Control installation program.

If you are upgrading from a previous release, complete the steps in “Upgrading LifeSize Control” on page 16.

### LifeSize Control Administrator

The LifeSize Control installation program also installs LifeSize Control Administrator, a web-based tool you can use to view and change the status of services and modify application, alarm, OpenLDAP, email, Microsoft Exchange, conference, database management (backup and restore), license and report configuration settings.

To open LifeSize Control Administrator, access `http://<LifeSize_Control_server_ip_address>/webcontroladmin.`
For more information, click **Help** in LifeSize Control Administrator:

### Installing Windows Components

Before installing LifeSize Control, you must install the following Microsoft Windows components on the server:

- Application Server Console
- ASP.NET
- Enable Network COM+ Access
- Enable Network DTC Access
- Internet Information Server (IIS)

To install the Microsoft Windows components, follow these steps:

1. From the Windows **Control Panel**, choose **Add or Remove Programs** and click **Add/Remove Windows Components** in the left panel.

2. From the **Windows Components Wizard**, select **Application Server** and click **Details**.
3. Enable the following required subcomponents:
   - **Application Server Console**—Provides a central location from which to administer web applications.
   - **ASP.NET—**Required to deploy ASP.NET web applications to a production server. LifeSize Control is an ASP.NET web application.
   - **Enable Network COM+ Access**—Builds on Component Object Model (COM) integrated services and features. Most LifeSize Control components are service components.
   - **Enable Network DTC Access**—Coordinates COM+ transactions. LifeSize Control components use DTC for remote calls.
   - **Internet Information Server (IIS)**—Provides the infrastructure for .NET and existing web applications and services. The default enabled subcomponents **Internet Information Service Manager** and **World Wide Web Service** are required to run LifeSize Control.
4. Click **OK**.
5. Click **Next** to complete the installation.
6. Close the **Add or Remove Programs** window.

## Running the Installation Program

The LifeSize Control installation program installs and prompts you to configure the LifeSize Control software and an OpenLDAP server. LifeSize recommends that you collect the following required information before performing the installation.

- The fully qualified domain name of your organization's SMTP server
- e-mail address of the person who will receive LifeSize Control alarms
- LDAP implementation
- Microsoft Exchange server
- The IP address for the OpenLDAP server
- The port for the OpenLDAP server (the default is port 389)
- The domain suffix of the OpenLDAP directory tree structure (for example, *example.com*)
- The Microsoft Exchange server's IP address
- The domain name for the Microsoft Exchange server
- The IP address for the LifeSize Control server

To run the LifeSize Control installation program, follow these steps:

1. If the welcome screen does not display after you insert the distribution media, open the LifeSize Control distribution media, and double-click **setup.exe**.

   a. Click **Next** on the **Welcome** screen.

   b. Accept the terms of the license agreement and click **Next**.

   c. Complete the **Customer Information** screen and click **Next**.

      You can specify whether you want to install LifeSize Control only for yourself or for all users of the server.

   d. Select **Typical** to install LifeSize Control in the default location (`Program Files\LifeSize\Control`) or select **Custom** to identify a directory into which to install LifeSize Control.

   e. Click **Next**, then click **Install** to begin the installation.

      When this stage of installation is complete, the **LifeSize Control Configuration** screen appears.

2. To configure LifeSize Control, enter values for the following fields.

   ***Note:*** The SMTP server and email addresses are required for alerts.

   a. **SMTP Server**—Enter the fully qualified domain name of the SMTP server for your organization.

   b. **To Email Address**—Enter the e-mail address of the recipient who will receive alerts.

   c. **From Email Address**—Enter the e-mail address that will appear as the *From* address of an alert message (for example, LifeSize_Control@example.com).

   d. **Use https**—Specify whether to use SSL for communication between the LifeSize Control server and the web clients or to use HTTP.

   e. **Make LifeSize Control the default web site?**—Choose **Yes** for the server's host name to be an alias for the LifeSize Control URL. Users can enter this host name in their browsers to access LifeSize Control, for example:

      `http://<hostname>`

   f. Click **Next**.

      The **OpenLDAP Installation** dialog appears and prompts you to continue. OpenLDAP installs on the same server as LifeSize Control and is a required component of a LifeSize Control installation.

3. Click **Next** to continue.

   The setup program installs the OpenLDAP server. The **LDAP Configuration** dialog appears.

4. Complete the LDAP server configuration by entering values in the following fields:

   a. In the **OpenLDAP Settings** area, complete the following:

      - From the **OpenLDAP Server IP** list, select the IP address for the OpenLDAP server. OpenLDAP installs on the same server as LifeSize Control.
      - Specify a **Port** to use. The default is port 389.
      - Specify the **domain suffix** for the OpenLDAP directory tree structure. For example, *example.com*.

   b. In the **User Authentication** area, select and enter values in the fields for one of the following:

      - **Configure for OpenLDAP**—Create a user account for logging into LifeSize Control. Enter a user name and password.

      - or -

      - **Configure for Active Directory**—Specify an existing domain and an existing user account for logging into LifeSize Control. The specified user must be set up so that passwords never expire.

        The machine on which you are installing LifeSize Control must already be on the domain if you choose this option.

        LifeSize Control uses Active Directory to access the user accounts for authentication purposes only, and does not add, delete, or modify user accounts.

   ***Note:*** The user must have administrator privileges. The password is case-sensitive.

   c. Click **Configure LDAP**.

      When the configuration completes, a status message appears.

   d. Click **OK** to close the status message.

   The **LifeSize Control configuration for Microsoft Exchange support** dialog appears.

5. By default, **Enable Exchange server integration with LifeSize Control** is selected. Complete the following fields:
   - Enter the Exchange server's IP address in **Exchange Server address**.
   - Enter the domain name for the Exchange server in **Domain Name**.
   - Enter an email address for **LifeSize Control email address**. For example, LifeSize_Control@example.com. This is the email account LifeSize Control monitors to provide scheduling integration with MicroSoft Exchange/Outlook.

     ***Caution:*** This email box must be dedicated for use by LifeSize Control. Do not send general email to it or use it to send email. You must not open this email box or modify any email messages in it. Doing so will interfere with the integration of Microsoft Outlook scheduling with LifeSize Control scheduling. Additionally, set the size of this mailbox to 500MB. You must log into the account in Microsoft Outlook at least once to make it available for LifeSize Control. While logged in, ensure the email box is set to the correct time zone.
   - Enter a password for the LifeSize Control email box in **LifeSize Control password**.
6. Click **Next**.

   The **Server Location Configuration** dialog appears.
7. Select values for the following fields:
   - From the **Country** list, select the country in which the LifeSize Control server is located.
   - From the **State** list, select the state in which the LifeSize Control server is located, if applicable.
   - From the **Server IP Address** list, select the IP address for the LifeSize Control server.
8. Click **Configure** and then click **OK**.

   ***Note:*** If the installation fails, refer to "Troubleshooting" on page 20. If you must reinstall LifeSize Control after fixing the problem, ensure that you uninstall the OpenLDAP server and the PostgreSQL database before attempting to install again. Refer to "Removing LifeSize Control" on page 19.
9. Click **Finish**.

   The LifeSize Control installation is complete.
10. Restart your computer to ensure that the changes take effect.

# Setting Up Your Environment

After installing LifeSize Control, set up your environment:

- Access LifeSize Control from your web browser.
- Activate LifeSize Control with a license key.
- Manage device passwords.
- Discover the devices on your network.
- Configure Microsoft Exchange to integrate conference scheduling with LifeSize Control.

After following these steps, you can begin managing your system.

## Accessing LifeSize Control

After installing LifeSize Control on a server, you can access the user interface from a supported web browser.

To log in the first time, follow these steps:

1. Access the user interface by entering the URL, for example:

   `http://<hostname>`

   ***Note:*** If LifeSize Control is not configured to be the default web site for the server, you must enter the full path for LifeSize Control, for example:

   `http://<hostname>/lifesizecontrol`

   The LifeSize Control launch page appears.

   ***Note:*** If the launch page does not appear, refer to “Troubleshooting” on page 20.

2. Click **Launch LifeSize Control**.

   The LifeSize Control login screen appears.

3. Enter a **User name** and **Password**. These values are the user name and password that you entered for user authentication in step 4 on page 10.

   ***Note:*** If cookies are enabled on your browser, LifeSize Control remembers the user name and password for subsequent sessions if you select the **Remember me** check box.

4. Press the **Enter** key or click the **LOGIN** button.

After logging in as a user with administrator privileges, you can set up other users. Refer to the online help for details.

## Obtaining the License Key

To activate LifeSize Control, you must first obtain a license key.

To activate LifeSize Control automatically using the Internet, follow these steps:

1. Select **License Manager** on the navigation bar.
2. Enter the license key included with the LifeSize Control CD in the **License key** section.
3. Click **Save**.
4. LifeSize Control automatically contacts the License Key server and unlocks the software.

To activate LifeSize Control manually without Internet access, follow these steps:

1. Send an email to support@lifesize.com requesting an unlock key for your license key. Include the following information:
   - Customer name
   - Purchase Order number
   - MAC address
   - License key
   - Channel Partner or reseller (if applicable)
2. Select **License Manager** on the navigation bar.
3. In the **Unlock key** section, enter the license key included with the LifeSize Control CD.
4. Enter the unlock key provided to you via email from LifeSize Communications.
5. Click **Save**.

   LifeSize Control unlocks the software with the key information you provided.

Your license information is displayed in the **License details** section.

## Managing Device Passwords

When you attempt to discover devices for the first time, LifeSize Control uses the device login information that you specify for each make of supported third-party device (for example, Polycom, Tandberg, and Codian) in the **Password Management** dialog. Refer to the online help for information about managing device passwords.

## Discovering Devices

After you discover audio and video communications devices on your network, you can manage them. Refer to the LifeSize Control online help for information about how to discover and manage devices.

## Configuring Microsoft Exchange

By adding mailbox resources in Microsoft Exchange for your audio and video communications systems, you can integrate Microsoft Outlook resource scheduling into LifeSize Control without any further customization.

### Microsoft Exchange Server 2003

The following instructions apply specifically to Microsoft Exchange Server 2003. If you are using Microsoft Exchange Server 2007, refer to “Microsoft Exchange Server 2007” on page 15.

Complete the following steps to create the mailbox resources needed to integrate Microsoft Outlook scheduling with LifeSize Control.

***Note:*** If the conference rooms in which you have your video communications systems already have room mailboxes in MicroSoft Exchange for scheduling purposes, begin with step 7.

1. Navigate to **Programs->Microsoft Exchange->Active Directory Users and Computers**.
2. Create a new user. Right-click on the directory icon containing the Active Directory users and select **New Object - User**.
3. Enter the **Full name**, and **User logon name** and click **Next**.
4. Enter and confirm the user’s password, select **Password never expires** and click **Next**.
5. Select **Create an Exchange mailbox** and enter an **Alias**, **Server**, and **Mailbox Store**. Click **Next**.
6. Click **Finish**.
7. To set up forwarding to LifeSize Control’s listener mailbox, right-click on the user you created in step 5 and select **Properties**.
8. Click the **Exchange General** tab of the **Properties** dialog box. Enter the **Mailbox store**. Click **Delivery Options**.
9. Select **Forward to** from the **Forwarding address** section of the **Delivery Options** dialog box and click **Modify**.

10. In the **Enter the object name to select** box, enter the mailbox you created for LifeSize Control during installation and select **OK**.

11. Select **Deliver message to both forwarding address and mailbox** and click **OK**.

12. Register the mail box for Auto Accept Agent to automatically process meeting requests. For more information refer to the Registering Mailboxes section of the Microsoft TechNet website: http://technet.microsoft.com/en-us/library/bb124104(EXCHG.65).aspx

    ***Note:*** Ensure that the Microsoft Outlook email box has the correct setting for current time zone. (Refer to Microsoft Outlook help to access this option.) This is crucial for proper scheduling.

13. To associate the mailbox you created for the conference room with the corresponding audio and video communications system in LifeSize Control, refer to the instructions in the LifeSize Control online help for integrating Microsoft Outlook with LifeSize Control.

    ***Note:*** It may take up to five minutes for the new user to be active and available after you create it.

### Microsoft Exchange Server 2007

The following instructions apply specifically to Microsoft Exchange Server 2007. If you are using Microsoft Exchange Server 2003, refer to “Microsoft Exchange Server 2003” on page 14.

***Note:*** If the conference rooms in which you have your audio and video communications systems already have room mailboxes in MicroSoft Exchange for scheduling purposes, begin with step 6.

Complete the following steps to create the mailbox resources needed to integrate Microsoft Outlook scheduling with LifeSize Control.

1. Start the Microsoft Exchange Management Console.

2. Create a mailbox for the conference room that houses your video communications system. Under **Recipient Configuration**, right-click on the **Mailbox** icon and select **New Mailbox**.

3. Select **Room Mailbox** for mailbox type and click **Next**.

4. Create a new user or select a current user if the conference room in which you have your audio and video communications system already has a user in Active Directory.

5. Enter an alias for the user and select the appropriate Mailbox database. Click **Next**. The mailbox and the corresponding user are created.

6. To set up forwarding to LifeSize Control's listener mailbox, double-click the mailbox created in step 5 and select the **Mail Flow Settings** tab. Double-click **Delivery Options**.
7. Select the check boxes for **Forward To** and **Deliver message to both forwarding address and mailbox** and click the **Browse** button. Select the mailbox you created for LifeSize Control during installation and select **Finish**.
8. To enable the user so that you can associate it with a video communications system, start the Active Directory User Management Console.
9. Locate the user you created in step 5. Right-click and select **Enable**.
10. Right-click and select **Reset Password**.
11. Enter and confirm the password and select **Password never expires**.
12. In Microsoft Outlook, log on to the email account for the video communications system and select **Options**.
13. Select **Resource Settings** and enable **Automatically process meeting requests and cancellations**.
14. Click the **Save** button.

    ***Note:*** Ensure that the Microsoft Outlook email box has the correct setting for current time zone. (Refer to Microsoft Outlook help to access this option.) This is crucial for proper scheduling.
15. To associate the mailbox you created for the conference room with the corresponding audio or video communications system in LifeSize Control refer to the instructions in the LifeSize Control online help for integrating Microsoft Outlook with LifeSize Control.

## Upgrading LifeSize Control

This release of LifeSize Control supports upgrades from version 3.x. To upgrade from a version earlier than 3.0, contact LifeSize Customer Support for assistance.

The LifeSize Control installation program installs the Microsoft .NET Framework 2.0 if not already installed. During an upgrade, the LifeSize Control installation program changes the ASP.NET version of all web sites installed in IIS to v2.0. Other web sites installed in IIS that are not running in their own application pools may not function properly after the upgrade. To work around this issue after performing the upgrade, refer to "Installation Ends with an Error Message" on page 20.

## LifeSize Control Administrator

The LifeSize Control installation program also installs LifeSize Control Administrator, a web-based tool you can use to view and change the status of services and modify application, alarm, OpenLDAP, email, Microsoft Exchange, conference, database management (backup and restore), license and report configuration settings.

To open LifeSize Control Administrator, access `http://<LifeSize_Control_server_ip_address>/webcontroladmin.` For more information, click **Help** in LifeSize Control Administrator:

## Upgrade Prerequisites

Before you upgrade your LifeSize Control installation, complete the following tasks:

- LifeSize recommends that you back up your LifeSize Control database before performing an upgrade. Refer to the LifeSize Control online help for instructions.
- Create a backup copy of the SharedXML folder and the *.config files that are located in the installation folder.
- Ensure that the server on which LifeSize Control is installed has at least 500MB of free disk space.
- Ensure that the server on which LifeSize Control is installed does not have an Active Directory installation and is not a domain controller.
- Ensure that you have administrator rights to perform the upgrade.
- Ensure that LifeSize Control is not in use during the upgrade.
- Ensure that an existing PostgreSQL installation does not exist.
- If OpenSSL exists on the server, ensure that the version is 0.9.7 or later or delete the LIBEAY32.dll and SSLEAY32.dll files (located in the C:\windows\system32 folder). The LifeSize Control installation program installs a compatible version of these files if OpenSSL does not exist on the server.

  ***Caution:*** If the LifeSize Control installation program detects an earlier version of OpenSSL, an error message appears indicating that you must delete the LIBEAY32.dll and SSLEAY32.dll files. When you click **OK** in the message dialog and then click **Next** in the installation dialog, the installation program quits. You must then delete the LIBEAY32.dll and SSLEAY32.dll files and uninstall LifeSize Control using the steps in “Removing LifeSize Control” on page 19. You cannot continue the upgrade or return your existing LifeSize Control installation to its previous state without uninstalling LifeSize Control, reinstalling the previous version and restoring its database from a backup. If you are upgrading your LifeSize Control installation, ensure you do not have an incompatible version of OpenSSL on the computer on which LifeSize Control is installed before you perform the upgrade.

## Performing an Upgrade

Before performing an upgrade, ensure that you complete all tasks in “Upgrade Prerequisites” on page 17. You must also know the IP address and domain name for your organization’s Microsoft Exchange server.

To upgrade from a previous version of LifeSize Control, follow these steps:

1. On the LifeSize Control distribution media, double-click **setup.exe**. The program automatically detects an existing LifeSize Control installation that is eligible for an upgrade.
2. When prompted to continue with the upgrade, click **Next**.

The **LifeSize Control configuration for Microsoft Exchange support** dialog appears.

3. By default, **Enable Exchange server integration with LifeSize Control** is selected. Complete the following fields:
   - Enter the Exchange server’s IP address in **Exchange Server address**.
   - Enter the domain name for the Exchange server in **Domain Name**.
   - Enter an email address for **LifeSize Control email address**. For example, LifeSize_Control@example.com. This is the email box LifeSize Control monitors to effect scheduling integration with MicroSoft Exchange/Outlook.

     ***Caution:*** This email box must be dedicated for use by LifeSize Control only. Do not send general email to it or use it to send email. You must not open this email box or modify any of the email messages in it. Doing so will interfere with the integration of Microsoft Outlook scheduling with LifeSize Control scheduling.
   - Enter a password for the LifeSize Control email box in **LifeSize Control password**.
4. Click **Next**.
5. Click **Finish**.
6. Restart your server to ensure that the changes take effect.

***Note:*** To integrate Microsoft Exchange/Outlook scheduling with LifeSize Control, refer to the instructions in “Configuring Microsoft Exchange” on page 14.

## Restoring Backups

Backing up your database and associated files and restoring those files is integral to proper management of your audio and video communication system. For details about backing up your database, refer to the LifeSize Control Administrator utility online help.

To restore a backup, do the following:

1. Open a **Command Prompt** window on the computer on which LifeSize Control is installed.
2. Navigate to `install_dir\LscUtils\DBRestore`

   where *install_dir* is the path to the folder in which LifeSize Control is installed. The default installation folder is `C:\Program Files\LifeSize\Control`.
3. Type the following command and then press ENTER:

   DBRestore.exe *"filePath"*

   where *filePath* is the absolute path to the backup file from which you want to restore the database.

   **Example**:

   ```
   C:\Program Files\LifeSize\Control\LscUtils\DBRestore>DBRestore.exe
   "C:\Program Files\LifeSize\Control\DBBackup\DBBackup_date_time.bac"
   ```

## Removing LifeSize Control

The LifeSize Control uninstall program removes all components that LifeSize Control installed, except the installation directory, any log files and device upgrade files that are stored in the installation directory, and the LifeSize_PostgreSQL directory (which is at the same level as the LifeSize directory). You must remove these directories manually after removing LifeSize Control.

***Note:*** This release of LifeSize Control does not appear in the **Add or Remove Programs** window.

To remove LifeSize Control from the server, follow these steps:

1. Access **Start->All Programs->LifeSize->Control->Uninstall**.
2. When prompted to remove LifeSize Control, click **Yes**.
3. When prompted to remove PostgreSQL, select **Remove** and click **Yes**.
4. When prompted to remove OpenLDAP, click **Yes**.
5. Restart your computer to ensure that the changes take effect.

# Troubleshooting

If your LifeSize Control installation or upgrade fails, or you cannot access the user interface after performing an installation or upgrade, use the information in this section to resolve the issue. For all other issues, or if the issue persists, contact LifeSize Customer Support for assistance.

## Installation Ends with an Error Message

The LifeSize Control installation program returns an error message and quits if any of the following conditions exist:

- An incompatible version of OpenSSL exists. When you click **OK** in the message dialog that identifies this condition and then click **Next** in the installation dialog, the installation program quits. You must then delete the LIBEAY32.dll and SSLEAY32.dll files (located in the C:\windows\system32 folder) and uninstall LifeSize Control before running the LifeSize Control installation program again. To uninstall LifeSize Control, refer to “Removing LifeSize Control” on page 19.

  ***Caution:*** If you encounter this message during an upgrade, you cannot continue the upgrade or return your existing installation to its previous state without uninstalling LifeSize Control, reinstalling the previous version and restoring its database from a backup. For more information, refer to “Upgrade Prerequisites” on page 17.
- Data folders from a previous, removed PostgreSQL installation exist and the LifeSize Control installation program cannot delete them. Delete the folders and then run the LifeSize Control installation program.
- During a new installation of LifeSize Control, an installation of OpenLDAP or PostgreSQL already exists. Remove the existing OpenLDAP or PostgreSQL installation and then run the LifeSize Control installation program.
- Insufficient free disk space exists. Make available at least 500MB of free disk space on the server and then run the LifeSize Control installation program.
- The upgrade process does not support the current LifeSize Control installation. Contact LifeSize Customer Support for assistance.

## Status Messages Require Additional Action

During an installation of LifeSize Control, the following status messages may appear.

| Status Message | Cause and Resolution |
|---|---|
| Could not access VBScript runtime for custom action <*name of custom action*>. | The Windows Scripting Host (WSH) is needed to run a VBScript custom action during the installation, but the WSH is not installed on the target machine.<br>Follow the instructions for downloading and installing Microsoft Windows Script 5.6 at:<br>http://www.microsoft.com/downloads/details.aspx?familyid=C717D943-7E4B-4622-86EB-95A22B832CAA&displaylang=en |
| Failed to update LifeSize Control database with LDAP information. | Configuration of the LDAP database failed due to errors encountered during the installation of the database.<br>Contact LifeSize Customer Support. |
| The process cannot access the file <*path and file name of OpenLDAP file*> because it is being used by another process. | This message may appear after you click **Configure LDAP** during the installation process.<br>Access **Start->Control Panel->Administrative Tools->Services** and stop the OpenLDAP Directory Service. Continue the installation by clicking **Configure LDAP**. |
| Error in updating the dynamic data source configuration file.<br>-or-<br>Error in updating the application configuration files. | Typically, this message appears when the files are in use by another application. You can continue with the installation provided the following files exist:<br>`<install_dir>\LscWeb\ASP\dynamicdatasource.xml`<br>`<install_dir>\LSCService.exe.config`<br>where `<install_dir>` is the installation folder for LifeSize Control. The default is `Program Files\LifeSize\Control` |

## Web Sites in IIS Function Improperly After an Upgrade

During an upgrade, the LifeSize Control installation program changes the ASP.NET version of all web sites installed in IIS to v2.0. Other web sites installed in IIS that are not running in their own application pools and that rely on an earlier version of Microsoft .NET Framework may function improperly after the upgrade. To work around this issue, do the following after performing the upgrade:

1. Open the IIS Manager. Click **Start->Programs->Administrative Tools->IIS Manager**.
2. Expand **Web Sites->Default Web Site**.
3. For each web application under **Default Web Site**, right click the application and select **Properties**.
4. Click the **ASP.NET** tab. Ensure that the version is set to the appropriate Framework version for the application. For LifeSize Control, the version is 2.0.

## Device Status Not Updating

Device status may fail to update dynamically in the user interface if other services or applications are listening on ports 161 or 162. Ensure that only LifeSize Control is listening on these ports. For more information about ports, refer to “Ports” on page 5.

## Login Issues

If the LifeSize Control launch page does not appear when you attempt to access the user interface, do the following on the computer on which LifeSize Control is installed:

- Access **Start->Control Panel->Administrative Tools->Services** and ensure that the status of the IIS Admin service is Started. If you installed LifeSize Control by upgrading from a previous version, do the following:
    1. Go to **Start->Run**. The **Run** dialog appears.
    2. Type `iisreset` in the **Open** list box.
    3. Click **OK**.
- Access the LifeSize Control Administrator at `http://<LifeSize_Control_server_ip_address>/webcontroladmin`.
    - Click **Service Status & Ports** and ensure that the status of all services listed in the **Services Name** column is Running.
    - Click **LDAP Settings**. Ensure that the IP address that you selected for the OpenLDAP server in step 4 on page 10 is correct. If it is not, click **Configure**. The **LDAP Settings** dialog appears. Select the correct IP address and click **Save**.

## Reinstallation Issues

The following issues may occur when LifeSize Control is reinstalled:

- If you uninstall and then reinstall LifeSize Control v3.0, the PostgreSQL installation may fail during reinstallation if either of the following registry keys exist:

  `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\pgsql-8.2`

  `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\pgsql-8.3`

  The installation program returns the following error message:

  ```
  'Service PostgreSQL Database Server 8.2' (pgsql-8.2) could not be
  installed. Verify that you have sufficient privileges to install
  system services.
  ```

  To resolve this issue, do the following:

  1. Click **Cancel** in the message dialog.
  2. Delete these registry keys:

  `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\pgsql-8.2`

  `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\pgsql-8.3`

  3. Run the LifeSize Control uninstall program. Go to **Start->Programs->Lifesize->Control->Uninstall**.
  4. Restart your computer to ensure the changes take effect.
  5. Run the LifeSize Control installation program. Refer to “Running the Installation Program” on page 8.