



Zixi Installation Guide

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Introduction

This Installation Guide includes installation procedures for the following Zixi products on Linux and Windows environments:

- Zixi Feeder
- Zixi Broadcaster
- Zixi Receiver

Security Settings

The following ports must be opened on your Firewall(s) for inbound and outbound traffic as described below:

Zixi Feeder Settings

Port	Type	Direction	Description
2088	UDP	Outbound	Feeder push to Broadcaster, Zixi protocol
7088	UDP	Outbound	Feeder push to Broadcaster, Zixi protocol with DTLS
1935	TCP	Inbound	Encoder push to Feeder, RTMP protocol
4200	TCP	Inbound	Web management UI, HTTP protocol

Zixi Broadcaster Settings

Port	Type	Direction	Description
2088	UDP	Inbound	Feeder push to Broadcaster, Zixi protocol
7088	UDP	Inbound	Feeder push to Broadcaster, Zixi protocol with DTLS
2077	UDP	Inbound	Receiver pull from Broadcaster, Zixi protocol
7077	UDP	Inbound	Receiver pull from Broadcaster, Zixi protocol with DTLS
1935	TCP	Inbound	Encoder push to Broadcaster, RTMP protocol
1935	TCP	Outbound	Broadcaster push to CDN or RTMP server, RTMP protocol

Introduction

Port	Type	Direction	Description
7777	TCP	Inbound	HTML5 video player or CDN pull from Broadcaster, HTTP streaming protocol - HLS or DASH
4444	TCP	Inbound	Web management UI, HTTP protocol

Zixi Receiver Settings

Port	Type	Direction	Description
2077	UDP	Outbound	Receiver pull from Broadcaster, Zixi protocol
7077	UDP	Outbound	Receiver pull from Broadcaster, Zixi protocol with DTLS
4300	TCP	Inbound	Web management UI, HTTP protocol

ZEN Master Security Settings

The following security settings are required to connect the various Zixi products to ZEN Master.

Zixi Feeder – ZEN Master Settings

Type	Port	Direction	Description
TCP	80/443	Outbound + Return	ZEN Master Authentication Servers: - 18.210.103.157 - 23.20.44.73 - 34.200.88.233 - 34.238.1.65 - 35.170.111.151 - 52.4.9.203
SSH	22	Outbound + Return	ZEN Master to <customer>.io.zixi.com
UDP	2077 / 2088	Outbound + Return	Stream authentication to <customer>.io.zixi.com
UDP	7077 / 7088	Outbound + Return	DTLS communication to customer.io.zixi.com

Zixi Broadcaster – ZEN Master Settings

Type	Port	Direction	Description
TCP	80/443	Outbound + Return	ZEN Master Authentication Servers: - 18.210.103.157 - 23.20.44.73 - 34.200.88.233 - 34.238.1.65 - 35.170.111.151 - 52.4.9.203
SSH	22	Outbound + Return	ZEN Master to <customer>.io.zixi.com
UDP	2077 / 2088	Outbound + Return	Stream authentication to <customer>.io.zixi.com
UDP	7077 / 7088	Outbound + Return	DTLS communication to customer.io.zixi.com

Zixi Receiver – ZEN Master Settings

Type	Port	Direction	Description
TCP	80/443	Outbound + Return	ZEN Master Authentication Servers: - 18.210.103.157 - 23.20.44.73 - 34.200.88.233 - 34.238.1.65 - 35.170.111.151 - 52.4.9.203
SSH	22	Outbound + Return	ZEN Master to <customer>.io.zixi.com
UDP	2077 / 2088	Outbound + Return	Stream authentication to <customer>.io.zixi.com
UDP	7077 / 7088	Outbound + Return	DTLS communication to customer.io.zixi.com

Installing Zixi Products

All Zixi Products (Feeder, Broadcaster and Receiver) can be installed and run on either Linux or Windows environments. The following sections describe the system requirements and installation procedures for each type of OS.

Installing Zixi Products on Linux

➔ To install Zixi products on a Linux environment:

1. Check that you have a link and credentials to the Zixi download site and the license activation keys. If you don't have them, please contact *Zixi Support* at support@zixi.com.
1. Check that your system meets the system requirements, see [SYSTEM REQUIREMENTS - LINUX](#).
2. Download and extract the installation file(s) using the procedures described in [DOWNLOADING AND EXTRACTING THE INSTALLATION FILE](#).
3. Activate the license through the web-based management UI using the procedures described in [ACTIVATING THE LICENSE](#).

System Requirements - Linux

Hardware

- CPU: Intel i3 dual core CPU or above
- RAM: 2 GB RAM (minimum)
- Networking: 2 x 1GB network card

Operating System

- Zixi Broadcaster - 64-bit CentOS 7.x or an equivalent Linux distribution with glibc 2.14+
- Zixi Feeder and Receiver - Linux CentOS 6/7, must be a 64-bit distribution
- Linux Ubuntu 12 or later, 64-bit
- Linux Debian 7 or later, 64-bit
- Non-GUI server distribution recommended due to conflicts with NetworkManager GUI application.

Network Management

- Feeder GUI: TCP 4200
- Broadcaster GUI: TCP 4444
- Receiver GUI: TCP 4300

Installing Zixi Products

- SSH Remote Tunnel: If enabled, the device reaches out on port 22 to the remote access server.

Network Streaming

- HTTP Proxy: TCP 4500
- HTTP Origin: TCP 7777 for HLS, HDS and DASH
- Zixi Push Pull to Broadcaster: UDP port 2088
- Zixi Pull to receiver: UDP port 2077
- UDP PULL/PUSH: Specified by user
- RTMP server: TCP 1935

Downloading and Extracting the Installation File - Linux

After receiving the email with the download link and the license activation keys, follow the instructions below. The procedures for downloading and extracting all Zixi products (Feeder, Broadcaster and Receiver) are identical. For the <zixi_product> parameter, enter the relevant product name (e.g. 'Feeder').



Make sure you are logged in as a Root user. If you are not logged in as a Root user, use the "su" command.

➔ To download and extract the file:

1. Create a Zixi folder by typing the following commands in the Linux console:

```
# mkdir /zixi
# cd /zixi
```

2. Type the # wget command followed by the download link that you have received via email, while excluding the "http://" part of the link. For example:

```
# wget --user=<customer_Name>--ask-password
downloads.zixi.com/<customerName>/<zixi_product>-<version_number>.tar.gz
```

3. You will be requested to enter a password, type the password that you have received from Zixi support.
4. Extract the installation file by typing the following command:

```
# tar xvfz <zixi_product>-<version_number>.tar.gz
# cd <zixi_product>
```
5. Run the installation script file by typing the following command:

```
# ./installMe.sh
```
6. Run prerequisites script file by typing the following command:

```
# ./prerequisites.sh
```

Following the completion of the installation, proceed to [ACTIVATING THE LICENSE](#).

Installing Zixi Products on Windows

➔ To install Zixi products on a Windows environment:

1. Check that you have a link and credentials to the Zixi download site and the license activation keys. If you don't have them, please contact *Zixi Support* at support@zixi.com.
2. Check that your system meets the system requirements, see [SYSTEM REQUIREMENTS - WINDOWS](#).
3. Download and extract the installation file(s) using the procedures described in [DOWNLOADING AND RUNNING THE INSTALLATION](#).
4. Activate the license through the web-based management UI using the procedures described in [ACTIVATING THE LICENSE](#).

System Requirements - Windows

Hardware

- Recommended processor: Intel® Core™ i3 dual-core or quad-core
- Memory requirements: 2GB (minimum)
- Network interface cards: Minimum of two gigabit Ethernet adapters are required

Operating System

- Windows® Server 2008/2012/2016/2019, 32-bit or 64-bit
- Windows 7/8/10, 32-bit or 64-bit

Network Management

- Feeder GUI: TCP 4200
- Broadcaster GUI: TCP 4444
- Receiver GUI: TCP 4300
- SSH Remote Tunnel: If enabled, the device reaches out on port 22 to the remote access server.

Network Streaming

- HTTP Proxy: TCP 4500
- HTTP Origin: TCP 7777 for HLS, HDS and DASH
- Zixi Push Pull to Broadcaster: UDP port 2088
- Zixi Pull to receiver: UDP port 2077
- UDP PULL/PUSH: Specified by user
- RTMP server: TCP 1935

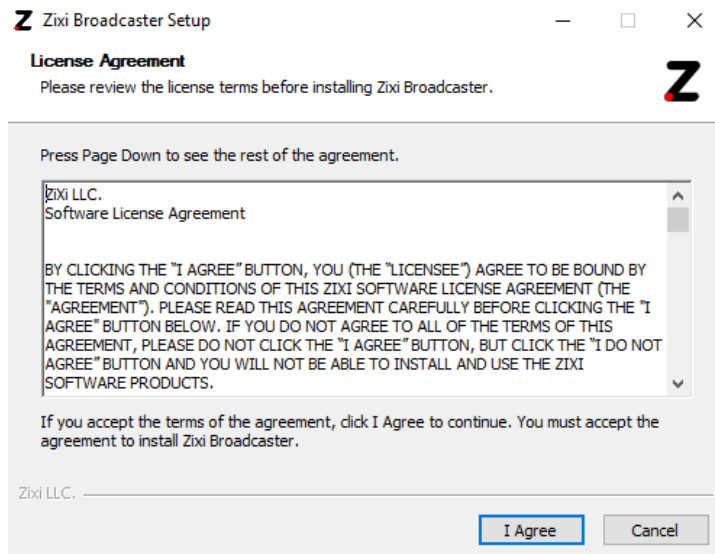
Downloading and Running the Installation

After receiving the email with the download link, follow the instructions below. The downloading and the extraction of all Zixi Products (e.g. Zixi Feeder, Zixi Broadcaster, etc.) is similar. In this procedure we will use Zixi Broadcaster as an example.

➔ **To download and run the installation:**

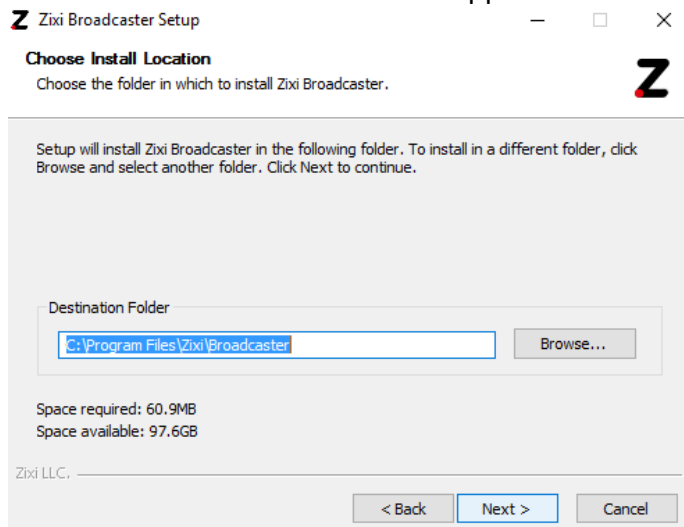
1. Download the **Zixi Broadcaster** installation file.
2. Double-click on the Zixi Broadcaster installation file.

The **License Agreement** window appears.



3. After reading the license agreement, click **I Agree**.

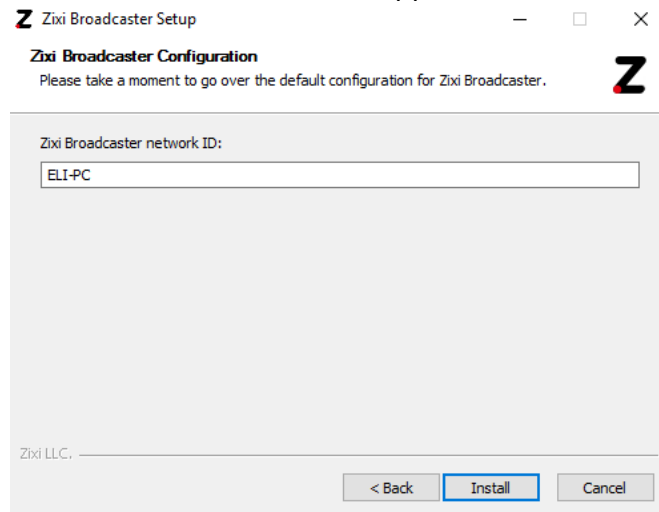
The **Installation Location** window appears.



4. Select the folder in which the Broadcaster files will be installed. The default location is in the Zixi folder which is in the Program Files folder.

5. Click **Next**.

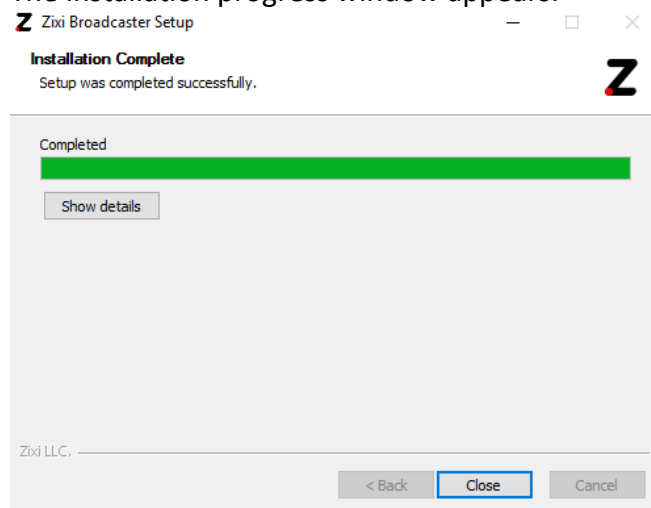
The **Broadcaster ID** window appears.



6. Enter a name for the **Broadcaster ID**. The default name is the local host.

7. Click **Install**.

The installation progress window appears.



8. When the installation is complete, click **Close**.

The Broadcaster Login page opens in your browser.

Following the completion of the installation, proceed to [ACTIVATING THE LICENSE](#).

Activating the License

Activation of the licenses is performed in the relevant web-based management UI. For all Zixi products (Feeder, Broadcaster and Receiver), the installation can be done online using a *License Key* or offline using a *License File*.



To activate Zixi license online, ensure connection to URL: license.zixi.com via TCP port 80. If you cannot open this connection, you can activate your license through a "License File". To obtain a license file, please contact *Zixi Support* at support@zixi.com.

Zixi Feeder

When logging in to a Zixi Feeder for the first time, you must activate the Zixi license.

Logging in to Zixi Feeder

➔ To log in to Zixi Feeder:

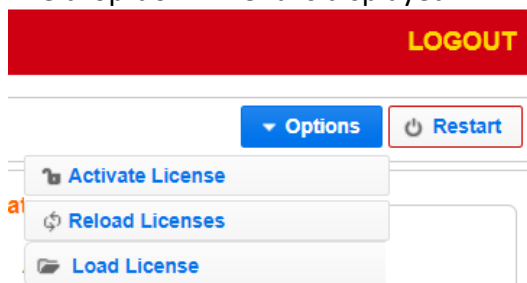
1. In your web browser, navigate to <http://localhost:4200>.
A user authentication window opens.
2. In the **User Name** field, enter '**admin**'.
3. In the **Password** field, enter '**1234**'.
4. Click **OK**.
The Feeder UI opens on the **Status** page.

Online Activation (License Key)

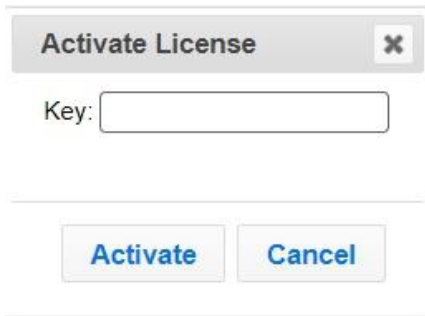
The following procedure requires connectivity to the Internet. If you are not able to connect, you can activate the Feeder using the procedure described in [OFFLINE ACTIVATION \(LICENSE FILE\)](#).

➔ To Activate the License online using a License Key:

1. In the **Status** page of the Zixi Feeder UI, click **Options** in the menu bar.
The drop-down menu is displayed.



2. Click **Activate License**.
The **Activate License** window appears.



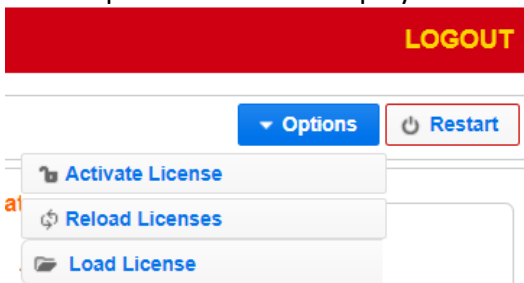
3. In the **Key** field, enter your Activation Key.
4. Click **Activate**.
The Zixi Feeder is enabled.

Offline Activation (License File)

If you want to activate your license without an internet connection, you can upload a *License File*. To obtain a License File, please contact *Zixi Support* at support@zixi.com.

➔ To Load the License File:

1. In the **Status** page of the Zixi Feeder UI, click **Options** in the menu bar.
The drop-down menu is displayed.



2. Click **Load License**.
The directory of the local drive opens.
3. Navigate to the License File and click **Open**.
A prompt window instructs you to Reload the license to activate the license.
4. Click again on **Options** and select **Reload Licenses** from the dropdown menu.
The Zixi Feeder is enabled.

Zixi Broadcaster

When logging in to a Zixi Broadcaster for the first time, you must activate the Zixi license.

Logging in to Zixi Broadcaster

➔ To log in to Zixi Broadcaster:

1. In your web browser, navigate to <http://localhost:4444>.
A user authentication window opens.

Activating the License

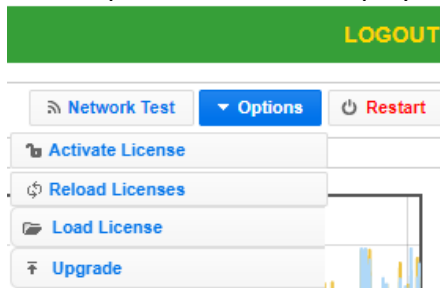
2. In the **User Name** field, enter 'admin'.
3. In the **Password** field, enter '1234'.
4. Click **OK**.
The Broadcaster UI opens on the **Status** page.

Online Activation (License Key)

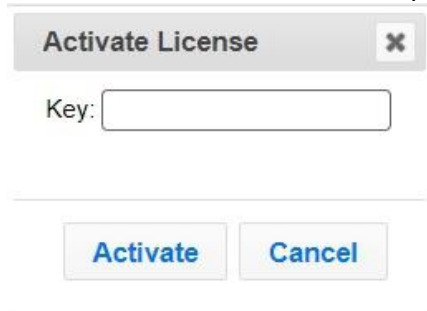
The following procedure requires connectivity to the Internet. If you are not able to connect, you can activate the Broadcaster using the procedure described in [OFFLINE ACTIVATION \(LICENSE FILE\)](#).

➔ To Activate the License online using a License Key:

1. In the **Status** page of the Zixi Broadcaster UI, click **Options** in the menu bar.
The drop-down menu is displayed.



2. Click **Activate License**.
The **Activate License** window appears.



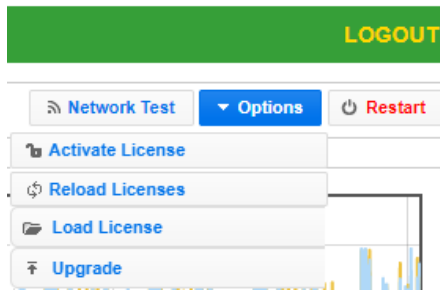
3. In the **Key** field, enter your Activation Key.
4. Click **Activate**.
The Zixi Broadcaster is enabled.

Offline Activation (License File)

If you want to activate your license without an internet connection, you can upload a License File. To obtain a license file, please contact *Zixi Support* at support@zixi.com.

➔ To Load the License File:

1. In the **Status** page of the Zixi Broadcaster UI, click **Options** in the menu bar.
The drop-down menu is displayed.



2. Click **Load License**.
The directory of the local drive opens.
3. Navigate to the License File and click **Open**.
A prompt window instructs you to Reload the license to activate the license.
4. Click again on **Options** and select **Reload Licenses** from the dropdown menu.
The Zixi Broadcaster is enabled.

Zixi Receiver

When logging in to a Zixi Receiver for the first time, you must activate the Zixi license.

Logging in to Zixi Receiver

➔ To log in to Zixi Receiver:

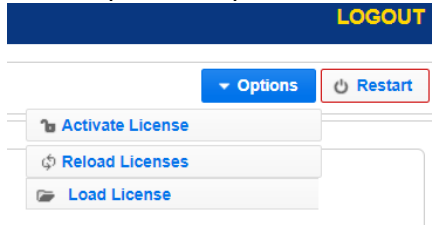
1. In your web browser, navigate to <http://localhost:4300>.
A user authentication window opens.
2. In the **User Name** field, enter '**admin**'.
3. In the **Password** field, enter '**1234**'.
4. Click **OK**.
The Receiver UI opens on the **Status** page.

Online Activation (License Key)

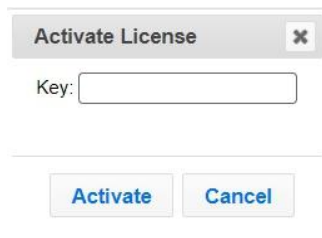
The following procedure requires connectivity to the Internet. If you are not able to connect, you can activate the Receiver using the procedure described in [OFFLINE ACTIVATION \(LICENSE FILE\)](#).

➔ To Activate the License online using a License Key:

1. In the **Status** page of the Zixi Receiver UI, click **Options** in the menu bar. The drop-down options menu is displayed.



2. Click **Activate License**. The **Activate License** window appears.



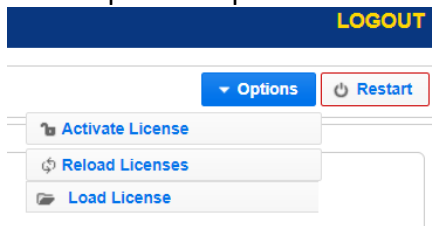
3. In the **Key** field, enter your Activation Key.
4. Click **Activate**. The Zixi Receiver is enabled.

Offline Activation (License File)

If you want to activate your license without an internet connection, you can upload a license file. To obtain a license file, please contact *Zixi Support* at support@zixi.com.

➔ To Load the License File:

1. In the **Status** page of the Zixi Receiver UI, click **Options** in the menu bar. The drop-down options menu is displayed.



2. Click **Load License**. The directory of the local drive opens.
3. Navigate to the License File and click **Open**. A prompt window instructs you to Reload the license to activate the license.
4. Click again on **Options** and select **Reload Licenses** from the dropdown menu. The Zixi Receiver is enabled.

- License for OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit

(<http://www.openssl.org/>)

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- License for Libssh2

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- License for DekTec's Linux SDK. Version 1, August 2012

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