

ZOOMOSC USER MANUAL



VERSION 4.5.1

Overview

Thank you for downloading ZoomOSC, a program for bidirectional communication with the popular Zoom video communications platform. By using Open Sound Control, ZoomOSC is able to act as the bridge between your favorite hardware and software ecosystems and Zoom.

In this document

We have listed several categories of information that should prove useful

- **Quick Start Guide** for those using ZoomOSC for the first time
- **Installation and Accounts** guides you through the initial setup process and login workflow
- **User Interface Guide** examines the GUI to provide familiarity for the application
- **Platform Comparison** provides an overview of the different behaviors you may encounter depending on the version of ZoomOSC you are using
- **Memory Management Overview** breaks down the different workflows supported by the application
- **Notes on Methods for Remote Control** provides information that you can use to gain remote access to other ZoomOSC Pro instances.
- **Data Usage Information** explains what personal data is used by ZoomOSC and how it is used.

QUICK START

DOWNLOADED ZOOMOSC?

DON'T KNOW WHERE TO START?

Let's begin with the basics. What is ZoomOSC?

ZoomOSC gives you more control over Zoom using OSC. OSC stands for Open Sound Control. It's a widely used protocol, which is just another word for a system of rules that allows for the transmission of information.

In this case, ZoomOSC allows you to send commands from one application to another (Zoom). Think of it like a telephone line. You send a command with one piece of software and ZoomOSC relays that command to Zoom. ZoomOSC is the middleman.

Like a telephone line, ZoomOSC can also communicate back to your software with information about the Zoom meeting and its participants. It's a two-way street.

There is no need to learn ZoomOSC in isolation; **one of the best parts of the product is the community of users built around it.**

- [ZoomOSC Test Kitchen](#), is a **weekly Zoom meeting** where you can ask questions of expert Zoom & ZoomOSC users.
- Other A/V communities including [Office Hours](#) and [AV Educate](#) have featured ZoomOSC's team in the past, and many of their **members use ZoomOSC professionally.**
- **Finally, support directly from our team is always one email away;** drop a note to info@liminalet.com and we'll get back to you as soon as possible!

WHAT CAN ZOOMOSC DO?

The sky's the limit!

Our clients have used ZoomOSC to do everything from programming magic shows to broadcasting international peace seminars. Many of our users learn ZoomOSC to just enhance their Zoom meetings.

Others implement ZoomOSC for virtual performances and productions. Some clients use the utility to control large-scale meetings and events. Whatever your industry, ZoomOSC can work for you!

IS THERE A STEEP LEARNING CURVE?

It all depends on how much you want to do.

You have Zoom. You have ZoomOSC. To complete the communication line, you need another piece of software. Some of the most common OSC Controllers/Media Servers are Isadora, Qlab, TouchOSC, Bitfocus Companion, OSCulator, Lemur, Open Stage Control, and Shift-Faders.

While this is not an exhaustive list, you will have to use an OSC Controller or Media Server alongside ZoomOSC and Zoom.

OPENING ZOOMOSC

Please install ZoomOSC on your computer.

There is a separate file for macOS and Windows 10. Make sure you downloaded the correct file.

Open ZoomOSC

Once everything is connected, you will see 2 windows. One window, the Console, will show you status updates and allow you to adjust your settings. The other window will allow you to join a Zoom meeting or webinar.

You are now ready to join a call!

CONNECT TO A ZOOM CALL

[LINK TO TUTORIAL](#)

Now you can join a meeting. There are two options.

1) LOG IN WITH ZOOM

ZoomOSC 4.1.0 introduced a new, online sign-in option called "Sign in with Zoom," which allows you to use your Zoom account to log into ZoomOSC. Signing in allows ZoomOSC to start and join meetings on behalf of the signed in account.

If you login with this option, you will see icons to:

- 1) **Start an Instant Meeting** - This will be a new meeting with a random Meeting ID started on your account.
- 2) **Start your Personal Meeting** - This will start and join your Zoom PMI
- 3) **Join a Meeting** - You can enter your Meeting ID & PW to join a Zoom call
- 4) **Join with Link** - You can paste a Zoom Meeting URL to join a Zoom call
- 5) **Join with Zoom Events** - You will see a window containing all of the Zoom Events you are hosting or register or registered for
- 6) **Adjust settings**

2) ONLY JOIN. This is the **easiest way**.

You don't need a Zoom account. You just need the Meeting Number and Meeting Password.

What if I don't know the Meeting Number and Password?

If you just have the Zoom link, you'll still be able to join the meeting. Let's say the Zoom link is the example below. The green numbers can be used as the Meeting ID. The blue is the long version of the password, which you may use.

<https://zoom.us/j/94698005313?pwd=QjJSMmtsOFJwcDVHMWdwRjZLUWswQT09>

THE COMMANDS

[LINK TO TUTORIAL](#)

If you are wondering what ZoomOSC can specifically accomplish, you've come to the right place. Please click the link above for a full tutorial on commands.

On our website, liminalet.com, you'll be able to download the [ZoomOSC Command Syntax document](#). This document will show you what commands you can use in a meeting. This will show you how you can control the meeting.

REMEMBER: YOU NEED TO SEND THE COMMANDS USING AN OSC CONTROLLER OR MEDIA SERVER.

All commands start with **/zoom**. All outputs begin with **/zoomosc**. There are a few different types of OSC messages. What comes after **/zoom** will depend on the category.

THE THREE TYPES OF COMMANDS

There are three main categories of OSC messages. Please see the Syntax document for more information.

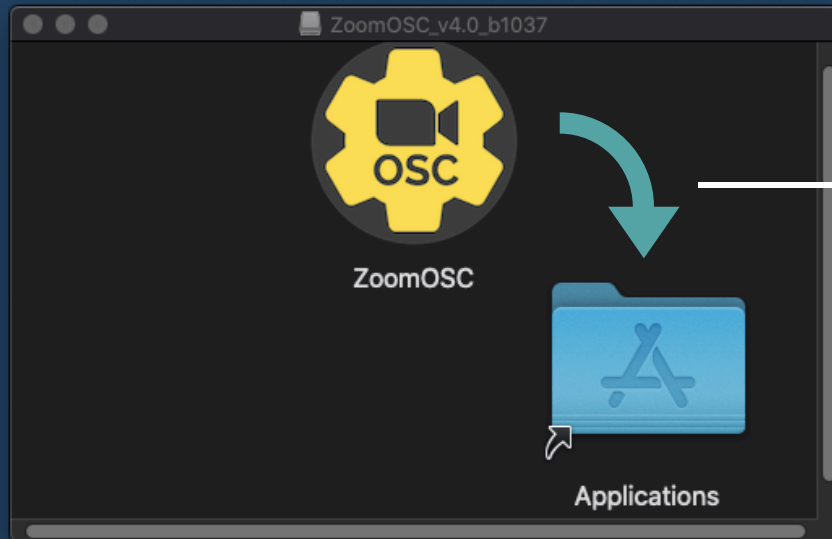
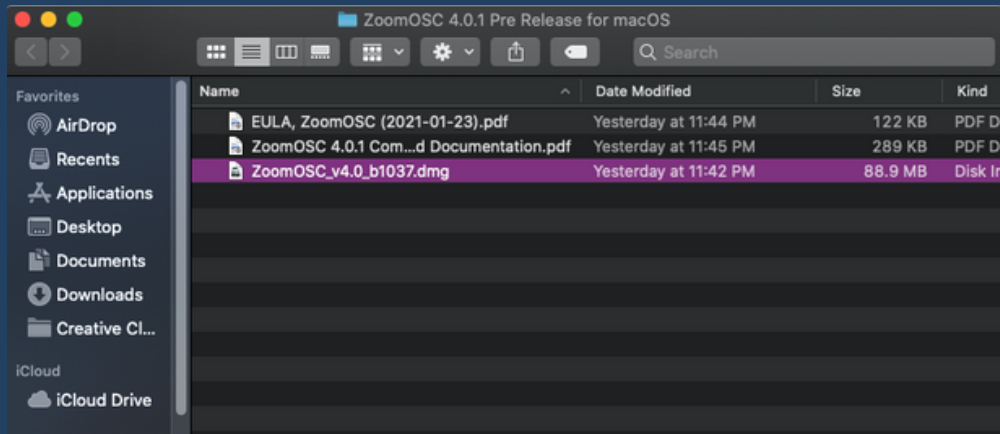
- You can use **USER COMMANDS** on a participant or a group of participants.
- You can use **GLOBAL COMMANDS** on everyone in the meeting. You could also change general settings for everyone.
- **OUTPUTS** are messages coming out of ZoomOSC.
 - Outputs can be trigger by events. For instance, if someone turns off their microphone, this will be an output.
 - Outputs can also be triggered by a ZoomOSC user sending a command. If you want to know the video devices a user has, you could send a command. You will get an output (or response) back.

INSTALLATION AND ACCOUNTS

macOS Mojave or later

Installation

ZoomOSC is installed via a .dmg file on macOS. Download the official installer from www.liminalet.com/zoomosc-downloads.



Drag and drop the
ZoomOSC
app icon into the
applications folder.



INSTALLATION AND ACCOUNTS



Managing your Pro License

Licenses

ZoomOSC Essentials can be upgraded to ZoomOSC Pro by entering a license key purchased from Liminal

Upon request, a web portal can be created to manage activations of ZoomOSC Pro online. Contact info@liminalet.com for support on setting up your management portal.

Liminal Apps are now included in the Zoom Events platform

Together the Liminal Apps create a professional AV suite to supplement the production capabilities of the Zoom Events platform. The latest Liminal App updates enable full license activation when signed-in with a "Hub Host" Zoom account.



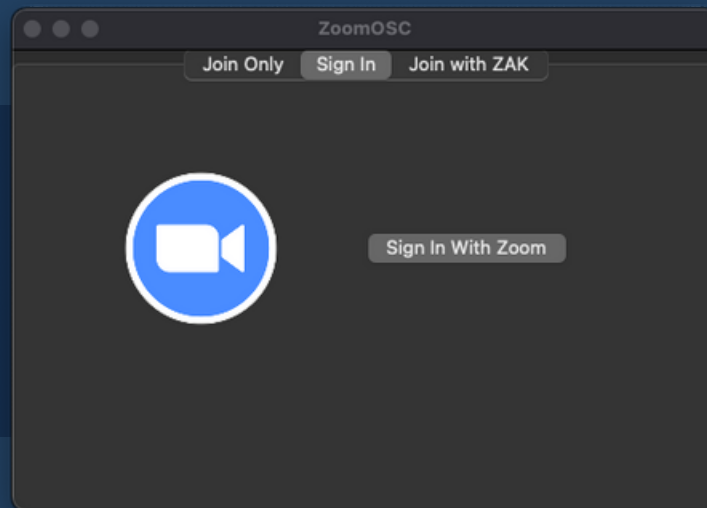
INSTALLATION AND ACCOUNTS

Sign in with Zoom - Adding the App to your Zoom Account

ZoomOSC uses online sign-in option called "Sign in with Zoom," which allows you to use your Zoom account to log into ZoomOSC. Signing in allows ZoomOSC to start and join meetings on behalf of the signed in account.

To add ZoomOSC to your account and complete sign in, use the following steps:

1. Launch ZoomOSC
2. Click the "Sign In" tab on this window:



INSTALLATION AND ACCOUNTS

SIGN IN

Welcome back!

New to Zoom? Sign Up Free

Email Address

Password [Forgot password?](#)

By signing in, I agree to the [Zoom's Privacy Statement](#) and [Terms of Service](#).

Sign In

Stay signed in

Or sign in with

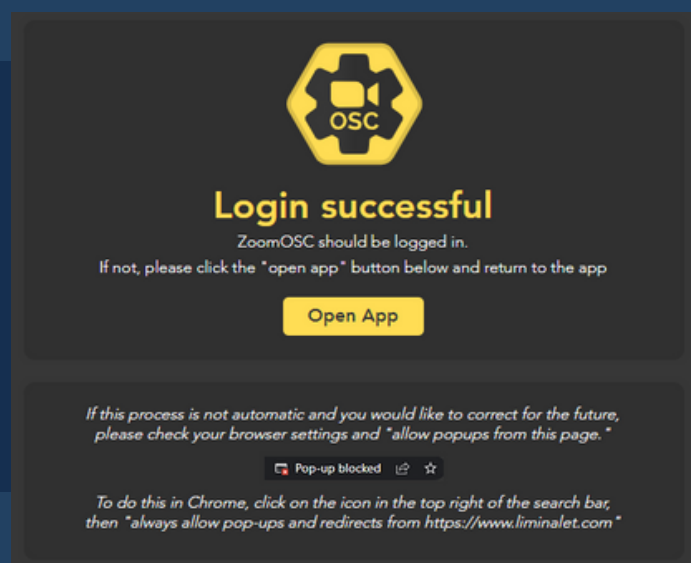
SSO Apple Google Facebook

Zoom is protected by reCAPTCHA and their Privacy Policy and Terms of Service apply.

3. Click on the “Sign in with Zoom” button
4. You will now be presented with a Zoom website to log into your Zoom account
 - On macOS, this will be inside a pop-up window
 - On Windows, you will be sent to your default browser to complete login
 - During this step, you can optionally select the option to “Stay signed in” for faster access in the future

5. If this is the first time you have logged into ZoomOSC, you will be prompted to add ZoomOSC to your Zoom account. Click Allow.
6. If the above steps are successful, you will be logged into ZoomOSC
 - On macOS, the pop up window will automatically close, and a few seconds later, you will advance to the logged in UI screen of ZoomOSC
 - On Windows, you will be redirected to a success page at [liminalet.com](https://www.liminalet.com), where you should receive a browser prompt to open ZoomOSC

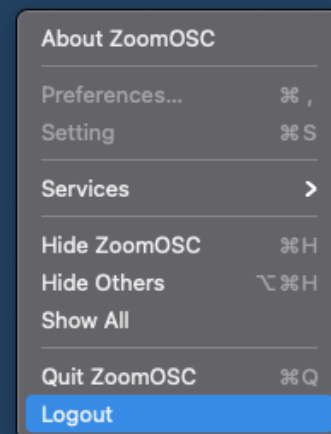
If you do not receive the prompt, you can click the provided button to return to ZoomOSC, at which point, you will advance to the logged in UI



INSTALLATION AND ACCOUNTS

Troubleshooting Login

- The account you are logging in with should be your Zoom account. No special/new account is required for ZoomOSC
- Business/enterprise end-users may need to contact their IT department to allow ZoomOSC to be added to your Zoom account, depending on how the organization is configured
- It is required that ZoomOSC be installed via the official installer in order for Sign in with Zoom to work properly. ZoomOSC is not a portable application.
- If you accidentally click "Stay Signed In" there are a few options to "forget" the account
 - On Windows, you can sign out of zoom.us using the default browser
 - On macOS, you can either click Sign Out at the top right of the pop up window during the authorization process, or you can click "Logout" under the ZoomOSC macOS top menu bar



Removing ZoomOSC from your Zoom Account

Should you decide you no longer need your Zoom Account attached to ZoomOSC:

- Login to your Zoom Account and navigate to the Zoom App Marketplace.
- Click Manage >> Added Apps or search for the "ZoomOSC" app.
- Click the "ZoomOSC" app.
- Click "Remove".

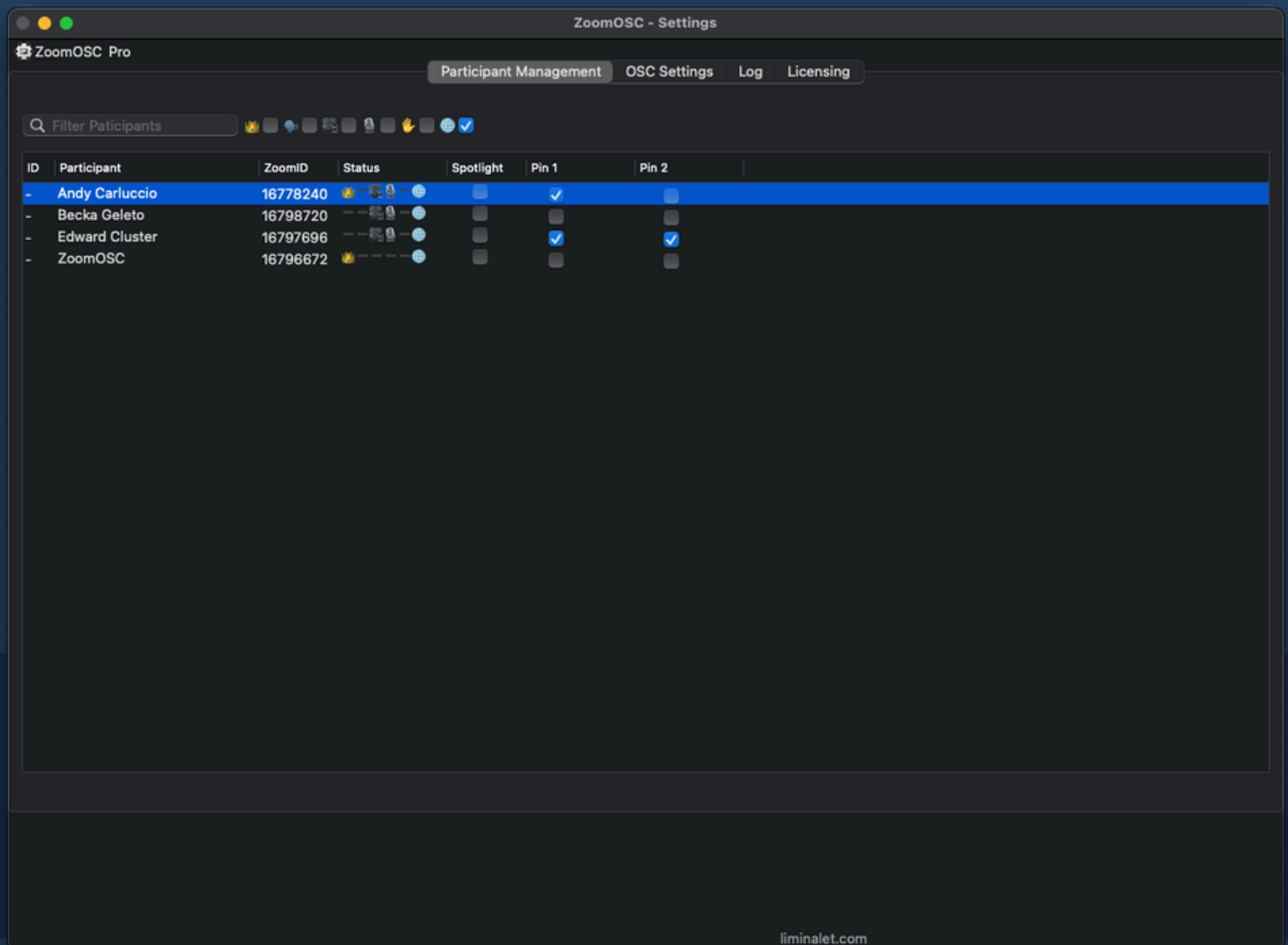


USER INTERFACE GUIDE

macOS

Participant Management Tab

This view displays a list of subscribed participants and allows you to easily manage pins and spotlights with filters, search parameters, and an easy-to-use matrix.

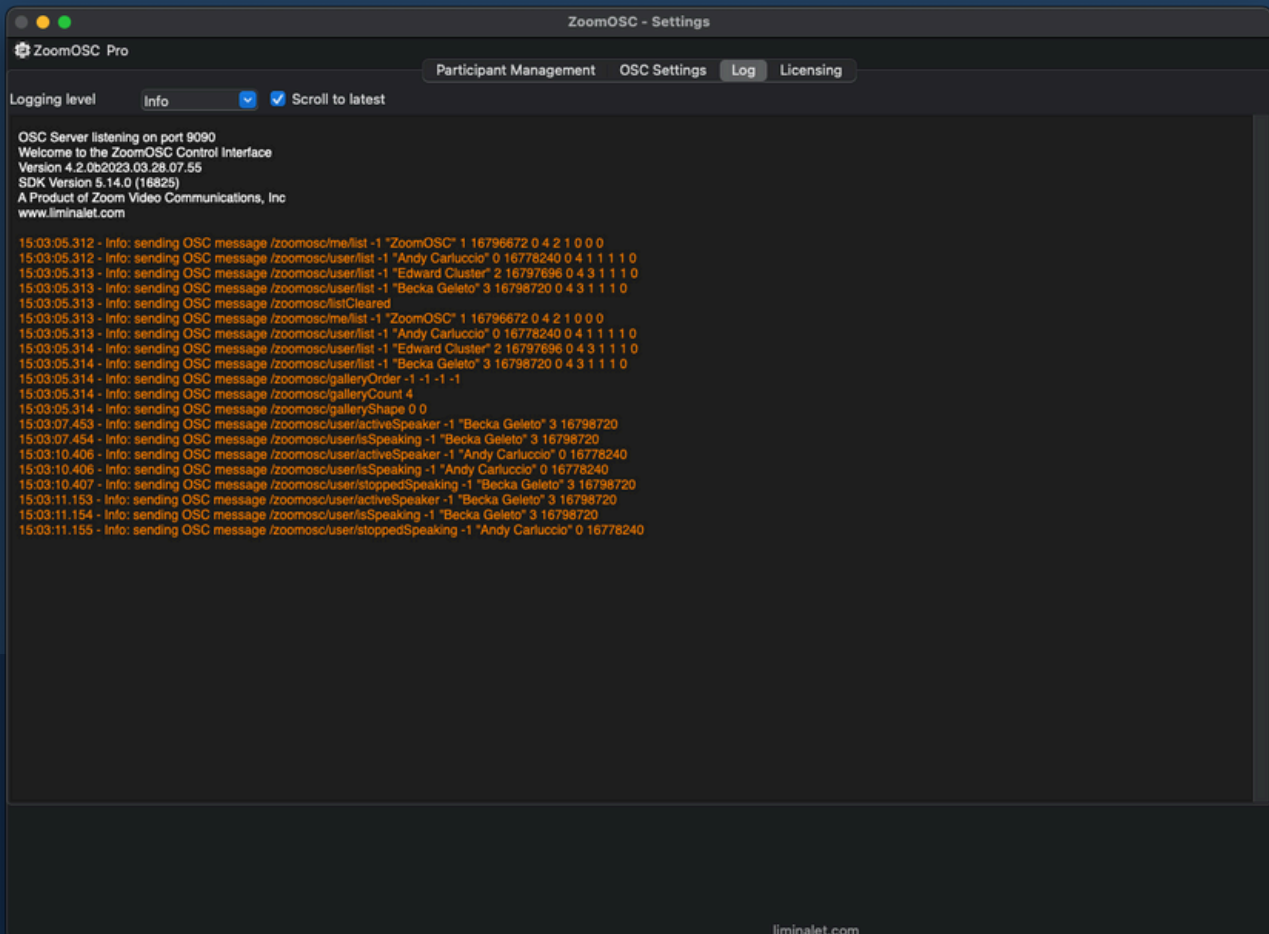


USER INTERFACE GUIDE

macOS

Log Tab

This view contains all outputs of the ZoomOSC Program. There are 5 levels of filtration access through the Logging Level selection menu: None, Errors, Warnings, Info, and Verbose. Reducing the logging level may improve performance at scale.



USER INTERFACE GUIDE

macOS

Settings Tab

Configure your OSC sending and receiving ports, set an optional allow-list and NIC selection, and set advanced features.

The screenshot displays the 'ZoomOSC - Settings' application window. The title bar shows 'ZoomOSC Pro' and the current tab is 'OSC Settings'. The interface is organized into three main sections:

- OSC NETWORK SETTINGS:** Includes fields for Transmission IP (127.0.0.1), Transmission Port (1234), Receiving Port (9090), OSC Output rate (Fastest Possible), and OSC address header (/zoomosc). It also features buttons for 'Reload', 'New', 'Browse', and 'Show in Finder' for the allow list, and a checkbox for 'enable allow-list'.
- REMOTE CONTROL SETTINGS:** Includes dropdown menus for 'Allow Control From' (Disabled), 'Specified User' (N/A), and 'Remote Control Group' (Disabled).
- ADDITIONAL SETTINGS:** Includes a 'Zoom Settings' button, dropdowns for 'Subscribe to' (All) and 'Gallery tracking mode' (Zoom ID), and buttons for 'Open existing', 'New', and 'Show in finder' for the participant target file. A checkbox for 'Enable breakout command' is also present.

The breadcrumb trail at the bottom left reads: 'Users > AndyCarluccio > Documents > performance_config.txt'. The footer of the application window shows 'liminalet.com'.

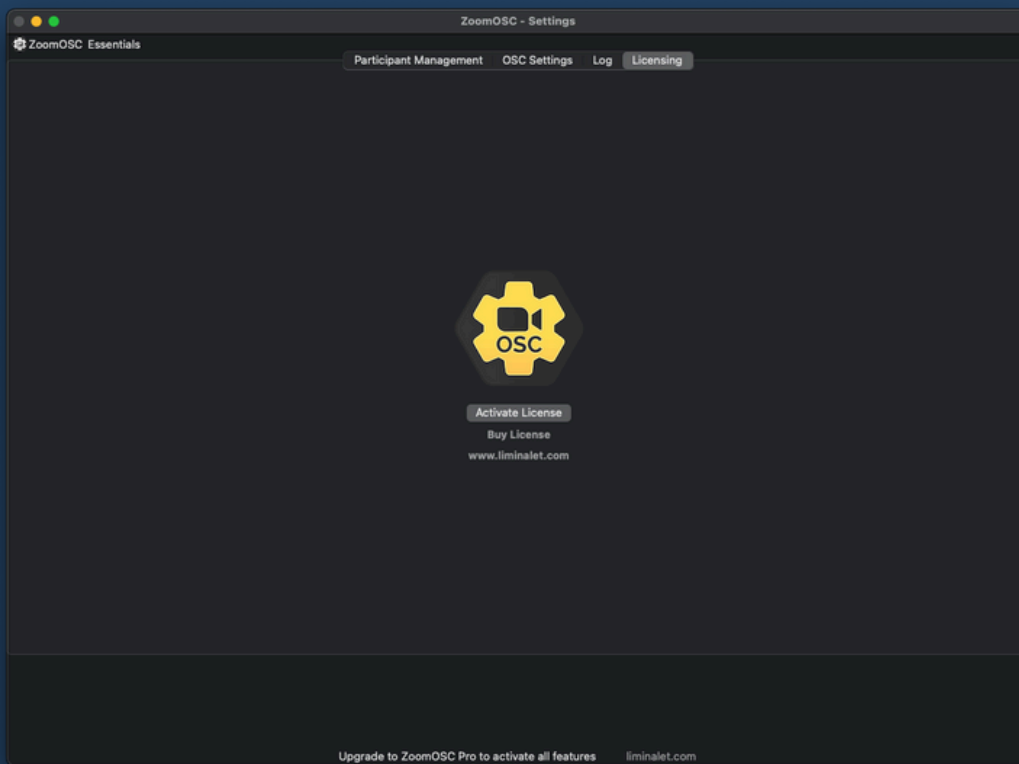


USER INTERFACE GUIDE

macOS

Licensing Tab

In this view, the user can activate ZoomOSC Pro or deactivate back to ZoomOSC Essentials as needed.



Hub Host License Option

As an alternative to activating with a device-based license sold from the Liminal website, if you sign into ZoomOSC with a Zoom account that is a Hub Host role in the Zoom Events platform, the app will activate to ZoomOSC Pro. Please contact support with any questions on Hub Host licensing.



MEMORY MANAGEMENT OVERVIEW

Many ways to build an address

ZoomOSC 4 introduces many new workflows for interacting with and getting data from Zoom participants via OSC. Please refer to the [Command Syntax \(API\) Document](#) for the full details.

Understanding Target IDs

Among the many ways to interface with Zoom call participants in ZoomOSC is the Target ID system. This is a method of defining a custom set of numeric controls for users. ZoomOSC's memory management functions facilitate the initialization, maintenance, loading, and saving of these Target IDs.

Target IDs function like a tag (and are, in fact, the only way of using ZoomOSC in previous versions!). When a user is tagged with a Target ID, they are placed in a zero-indexed list and can be interacted with through their Target ID, which locates them in the list.

Generally, Target IDs are now a legacy workflow in ZoomOSC thanks to all of the new interfacing options. This feature will remain in ZoomOSC for the foreseeable future to ensure compatibility with previous integrations and the logic they rely on.

The lasting power of Target IDs, even in the context of the new interfacing options, is the ability to build controllers and patches that are agnostic to the actual identities of the people the interface is designed to function upon. A few memory management calls are all that are required to bring your interface up to speed on what is happening in Zoom!

The List Reply

One of the most important features of ZoomOSC Pro is the list output that is requested by the `/zoom/list` command. This output provides full frames of data on every participant in the subscription list. This feature has many potential uses, but it is especially helpful for creating custom integrations with ZoomOSC from 3rd party software, including switcher and broadcaster products.



DATA USAGE

How Your Data is Used by ZoomOSC

The purpose of ZoomOSC is to accept and transmit control data via the network using a UDP native network protocol known as Open Sound Control. ZoomOSC will send information / events as callbacks via this protocol to third party systems on the local network in facilitation of its role as a plugin enablement platform for controlling the provided client. You can manage which systems can send requests to ZoomOSC using the "allow list" feature. To learn more about what information can be sent and received from ZoomOSC, check out the [API Syntax Guide](#).

In addition, if you opt to Sign in with Zoom, ZoomOSC will be able to start and join meetings using the account you logged in with. The act of logging in with your Zoom account enables ZoomOSC to request your ZAK token from the Zoom API and leverage it to offer these services and capabilities in conjunction with the brokering service in the [liminalet.com](#) web server, which is owned and operated by Zoom.





RESOURCES

SIGN UP FOR LIMINAL'S NEWSLETTER TO STAY
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SUBSCRIBE TO LIMINAL ON YOUTUBE FOR
TRAININGS AND TUTORIALS

