Tiles for Zoom Documentation

v1.2.3

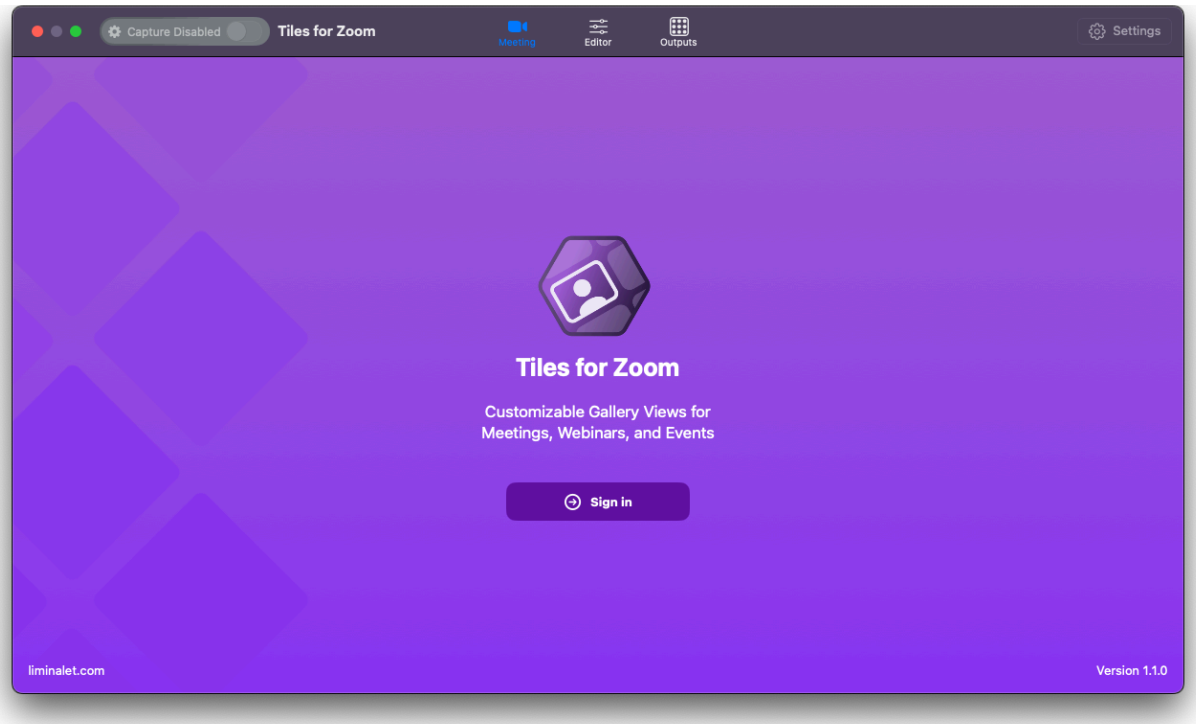
Installation and Accounts

Sign in with Zoom - Adding the App to your Account

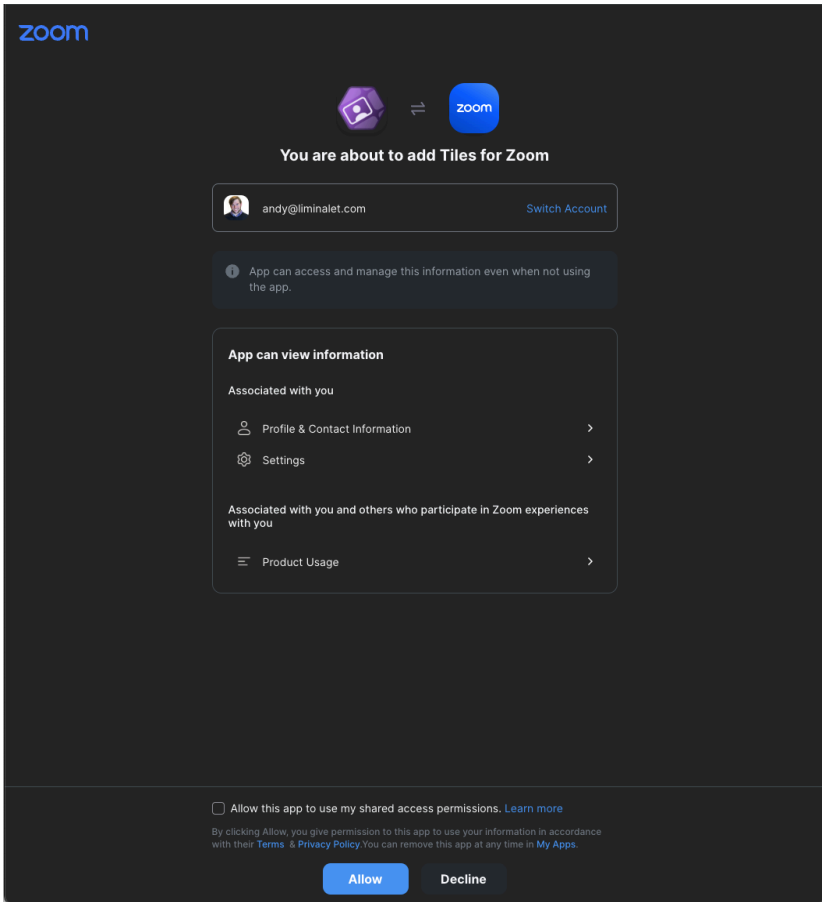
Tiles has an online sign-in button which allows you to use your Zoom account to log into the app. Signing in allows Tiles to start and join meetings on behalf of the signed in account, access the display name and other account details, and join Zoom Meetings, Zoom Webinars, and Zoom Events.

To sign into Tiles:

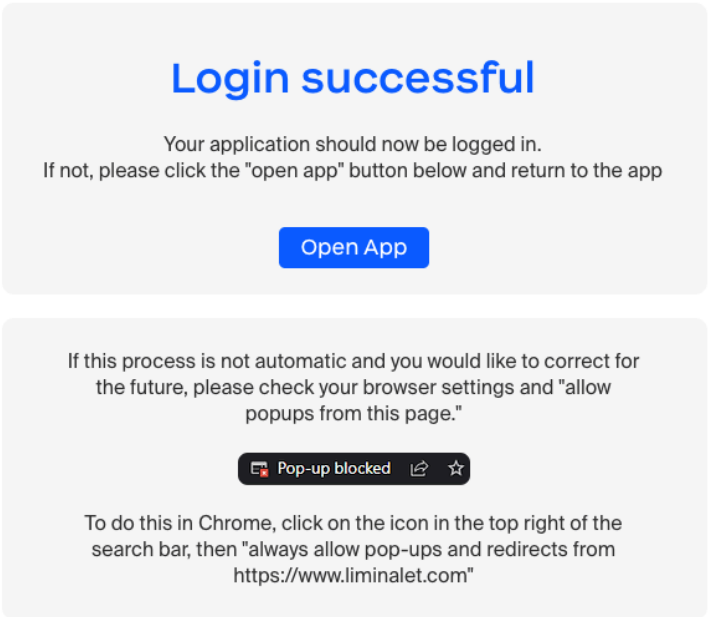
1. Launch Tiles.
2. Click the “Sign In” button:



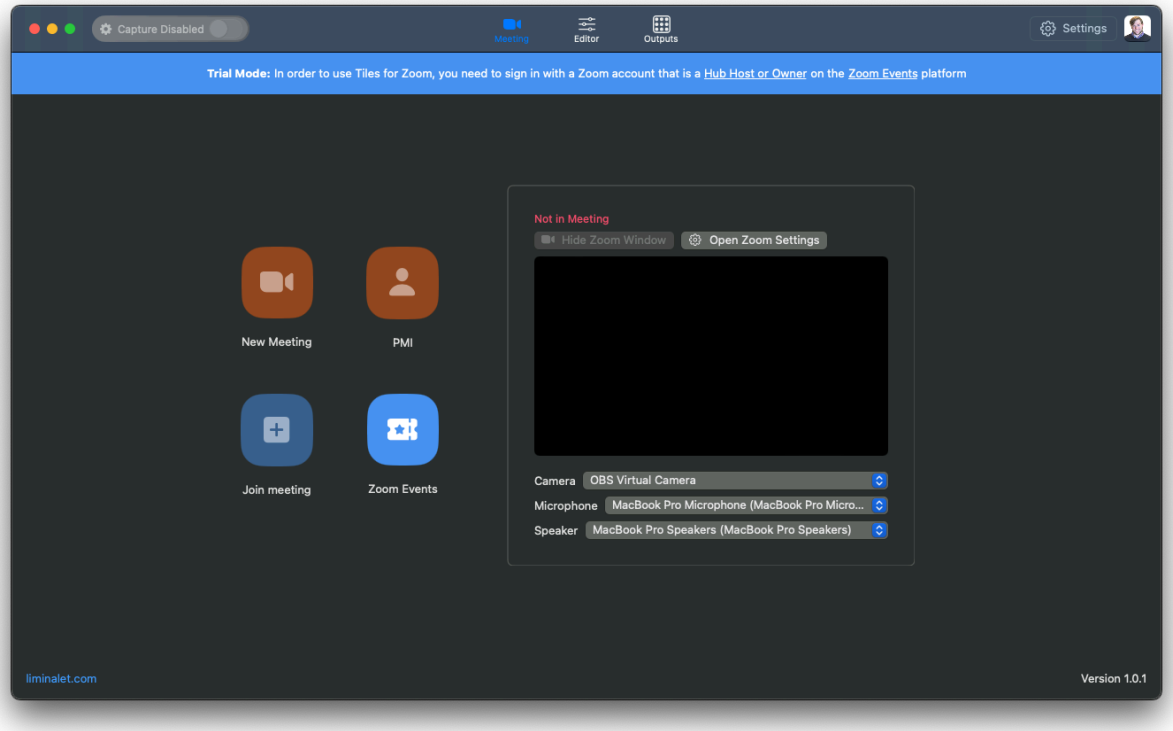
3. You will now be presented with a Zoom website to log into your Zoom account. If this is the first time you have logged into Tiles, you will be prompted to add Tiles to your Zoom account. Click Allow.



4. This page should redirect you to the liminalet.com login success page where you should proceed to connect to Tiles by opening the app from the browser



5. If the above steps are successful, you will be logged into Tiles. You will see your profile image in the top right corner of Tiles where you can view your account in the Zoom Web Portal or sign out.



6. Tiles uses your camera and microphone in meetings. It also uses screen recording to capture your output displays. Give Tiles access in your System Settings to enable these features when prompted.

Enterprise Provisioning

Are you a business/enterprise end-user? You may need to contact your IT department to allow Tiles to be added to your Zoom account, depending on how your organization is configured. IT can add Tiles to your organization at https://marketplace.zoom.us/apps/MPW5uVNgRuepjba7OOURpA

Removing Tiles from your Zoom Account

Login to your Zoom Account and navigate to the Zoom App Marketplace.

- Click Manage > Added Apps or search for the "Tiles for Zoom" app.
- Click the "Tiles for Zoom" app.
- Click “Remove”.

Licensing for Tiles

Tiles is activated when signed in with a Zoom account that has the Zoom Enhanced Media add-on license assigned. Additionally, you can also activate Tiles by signing in with a Zoom account that is an active Hub Host or Hub Owner on the Zoom Webinars and Events platform.

If you don't sign in, or you sign in with a Zoom account that does not meet the requirements, Tiles will remain in Trial Mode.

Activate ZoomISO with a Zoom Enhanced Media license

Tiles is included in the Zoom Enhanced Media add-on license along with the rest of the Liminal Apps at no additional cost. Once an Enhanced Media license is purchased, assign it to the user in your Zoom organization who will then be able to sign into Tiles for product activation. Tiles can join any Meeting, Webinar, or Event that the signed-in user is entitled to join, even if they take place on a different account.

For more information on the Enhanced Media license option for Liminal Apps, please see: https://support.zoom.com/hc/en/article?id=zm_kb&sysparm_article=KB0085055

Activate ZoomISO with a Zoom Webinars and Events Hub

Zoom Events and Zoom Webinars Plus license holders can create Hubs on the events.zoom.us website to manage their organization's access to license features. Under the Team tab of the Hub page, the Hub Owner can add additional Hub Hosts from within their organization. The Hub Owner and all Hub Hosts are able to activate Tiles by signing into the app. Tiles can join any Meeting, Webinar, or Event that the signed-in user is entitled to join, even if they take place outside of the Zoom Events platform or account.

For more information on the Zoom Events Hub license option for Liminal Apps, please see: https://support.zoom.com/hc/en/article?id=zm_kb&sysparm_article=KB0083982

Trial Mode

If Tiles is not activated, it will operate in Trial Mode. While in this mode, the app is fully configurable, but Tiles will be unable to join Zoom Meetings, Webinars, or Events.

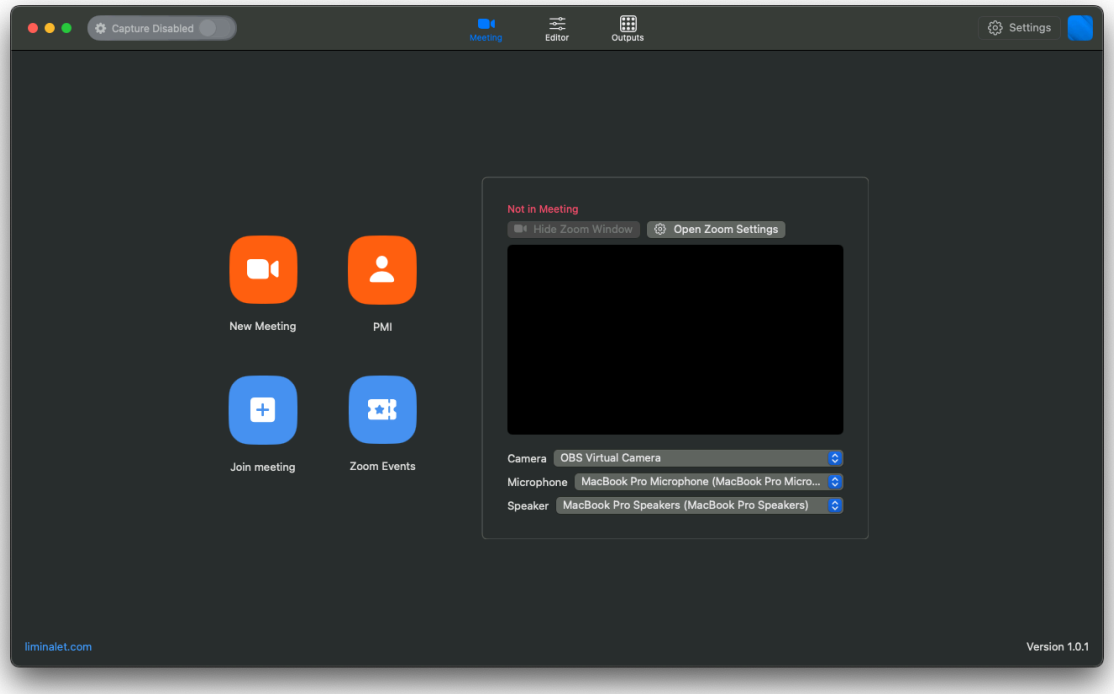
Using the Application

At a high-level, the following process is a general approach to using Tiles:

1. Sign in
2. Design custom galleries in the Editor Tab
3. Join a meeting
4. Start the Capture Engine
5. In the Outputs tab, configure the display output settings
6. In the Outputs tab, moderate the participants by blocking or favoriting

Caution: Tiles is a highly customizable application, so it is essential to test your exact configuration and workflow before using the app in a live production environment.

Meeting Tab

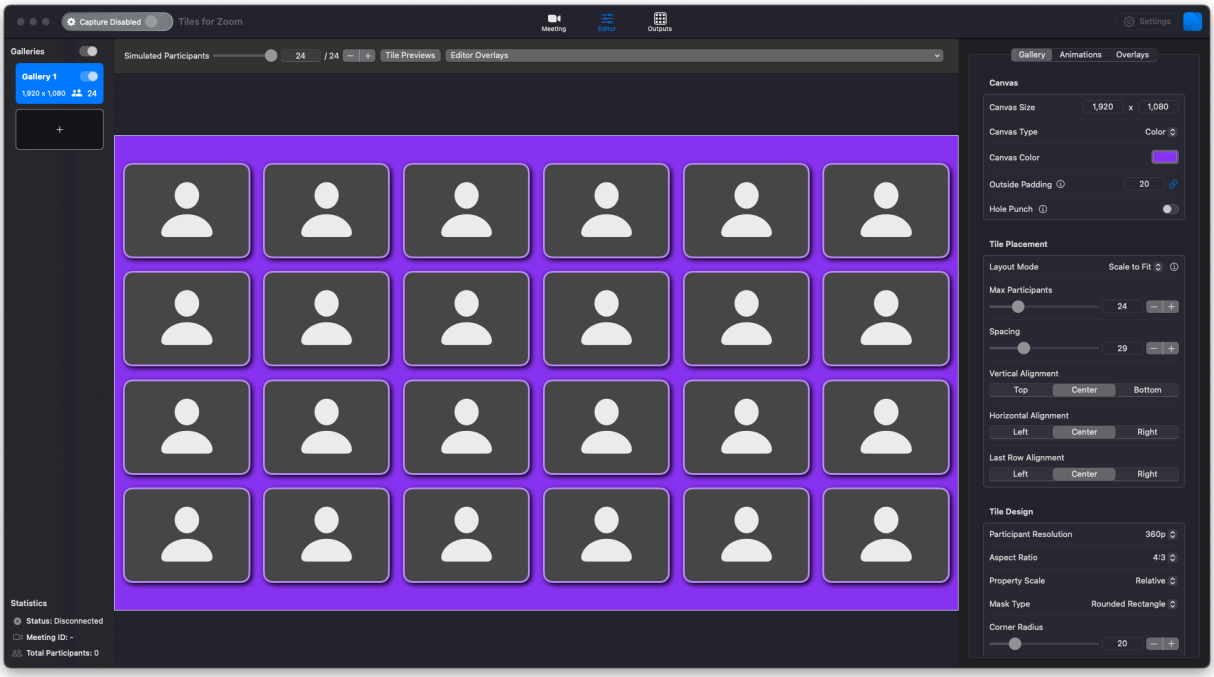


After signing into the app, you are free to join Meetings, Webinars, and Events from any account that the signed-in user is allowed to join. Start a new meeting, start your personal meeting, or join a meeting. Use the device dropdowns to quickly adjust device settings before joining the meeting. You can also open the Zoom Settings window from this tab.

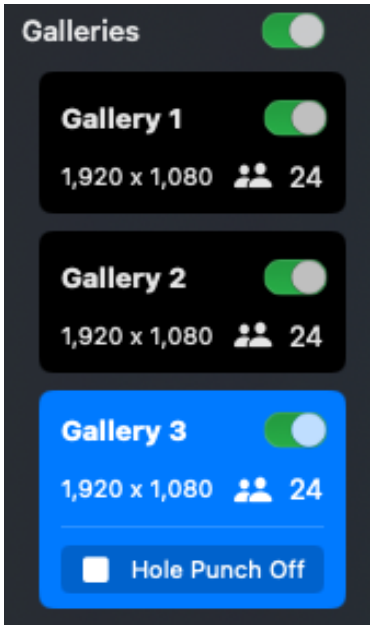
Once you have joined a meeting, adjust your device settings, just as you would in a normal Zoom meeting. If breakout rooms have been enabled by the host, you can view and join breakout rooms. You can toggle the visibility of the Zoom meeting window from this tab.

Editor Tab

Create and edit new Galleries in the Editor tab. Use the settings in the right pane to create your custom gallery view.



Gallery Cards



Located on the left side of the Editor Tab, Gallery Navigation allows you to select which display to preview and edit. Each Gallery Card shows the name, resolution, and maximum quantity of participants. The + button at the bottom of the list allows you to create new displays. You can right click on a Gallery Card to delete, duplicate, or rename a Gallery. When the Output Engine is Enabled, you cannot add or delete Galleries.

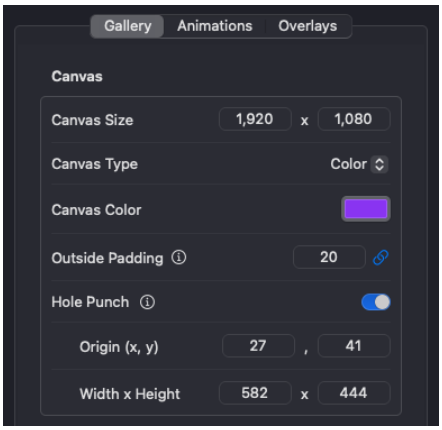
Galleries can be enabled or disabled by toggling the slider on each Gallery Card. Changing this toggle will trigger the Gallery Transition animation specified in the Animations tab. The toggle at the top of the list will move the toggles for all galleries together. Other settings such as Hole Punch can be activated or

deactivated via the Gallery Card. Gallery Cards are available on the left side of both in the Editor Tab and the Outputs Tab.

Gallery Editor

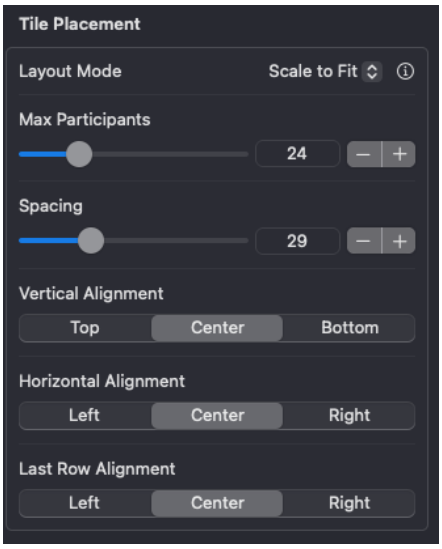
The Gallery Editor controls the design of the gallery. It is divided into multiple sections based on functionality.

Canvas



Controls the background and size of the output. Resolution is fully customizable to support any aspect ratio. The gallery's canvas background can be a color, an image from disk, or transparent. The padding amount for insetting the tiles within the canvas resolution can be set uniformly or on a per-side basis. The Hole Punch option allows you to define a rectangular space in which intersecting tiles can be hidden or shown when using the trigger on the Gallery Card. The Hole Punch can also be positioned by dragging and resizing the rectangle in the Preview area directly, which will edit the origin and shape.

Tile Placement



Settings for the layout of tiles within the gallery. Each Layout Mode includes different sub-settings related to the organization rules of tiles in the gallery. Scale to Fit mode makes the tiles as large as possible within the Canvas and is useful for maximizing the use of space. Fixed Tile Size allows the tile size to be set as a percentage of the maximum size, and is useful especially when combining multiple galleries together to maintain their alignment regardless of how many participants attend. Arena Seating mode derives the maximum participants from several parameters that create a forced perspective effect with tiles getting smaller as the rows increase.

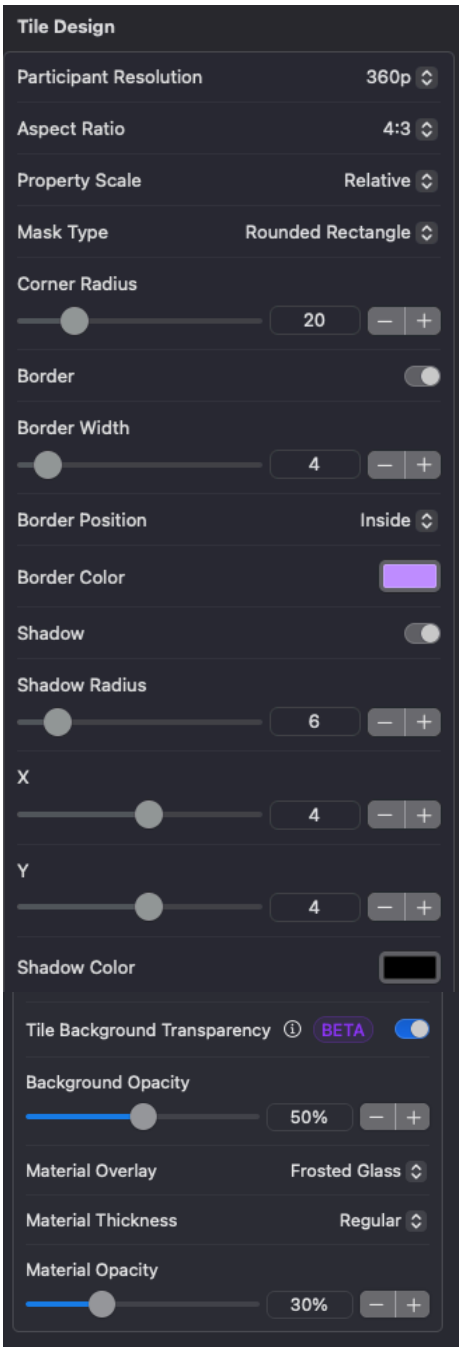
When using Fixed Tile Size, there is an option to configure Placeholders, which can be images or GIFs that will be used for an empty tile, instead of removing the tile from the gallery.

Tile Design

Every tile on an individual gallery will use the same design. The target resolution of the participants in the tiles can be set independently of the size and shape of the tile itself. Tiles can be rounded rectangles or ellipses with customizable borders and shadows.

The Property Scale setting will make several of these settings either relative to the size of a tile or absolute with respect to the size of the canvas. For example, using Absolute property scaling with a specific corner radius will create the impression of the corners becoming increasingly round as the tiles decrease in size, whereas Relative mode will preserve the impression of how rounded the corners are at all tile sizes.

Borders and Shadows can be enabled for the design, revealing additional settings to configure their position, shape, and color. Creative use of these settings can open many design possibilities such as glow, beveled edges, or depth.



Tile Background Transparency (BETA)

Tiles can create an immersive effect by blending the background of a participant with the Canvas. This feature uses the background segmentation technology used by Zoom features like Virtual Backgrounds to compute an alpha mask of each participant on their devices, distributing the load off the Tiles device. In the event where the participant's device cannot create a mask or the feature is not supported in the meeting, a radial vignette will be used instead. Activating this feature requires Host or Co-Host permission, and may require configuration of the meeting owner Zoom account in some situations. This feature is experimental, and not recommended for use in a live production environment at this time.

Animations Editor

The Animations Editor allows you to customize the transitions used by Tiles based on certain trigger events that could take place during the meeting. It also supports animations that can run in an ambient state.

Each animation has its own set of properties that can be adjusted. Tiles supports multiple animation modes that govern the animation style such as Linear, Ease in out, and Spring.

A unique length of time can be set for each animation trigger. The type of animation used will determine when the participant will “switch” during the duration of the animation.

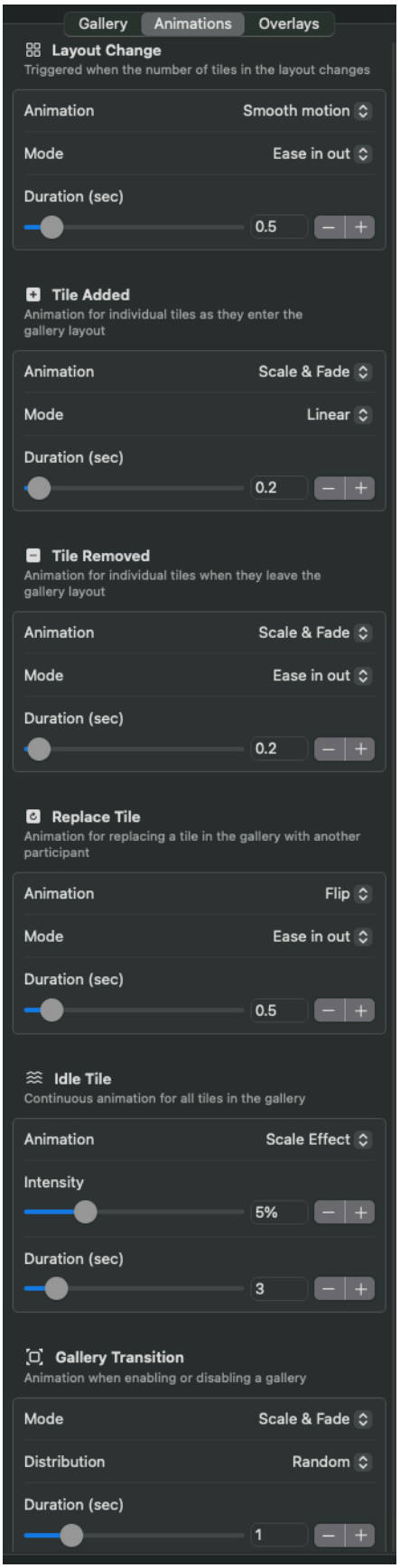
Idle Tile Animation refers to a continuous animation that will run for all tiles in the gallery. Each Idle Tile Animation has a control for intensity and duration, which can tune the effect to control its prominence.

Gallery Transition animations are triggered when a gallery is enabled or disabled by using the toggle button located on the Gallery Card. The settings control how the individual tiles in a gallery will enter when the gallery is enabled. The designed transition will play in reverse when a gallery is disabled.

Just like each gallery can have its own visual design, Animations are specific to each gallery as well.

It is important to consider how animations will appear in combination with one another. For example, if a Layout Change is triggered because of a Tile Added event, the individual tile being added to the gallery will use the Tile Added animation while the re-flowing of the other tiles will follow the Layout Change animation.

Be sure to test the animations under the expected production system load to confirm that they remain fluid in real-world show conditions as these effects will leverage system resources when triggered.



Overlays Editor

The Overlays Editor allows you to customize the tiles with overlays that correspond to various data and events in Zoom.You can select the placement and size in the editor.

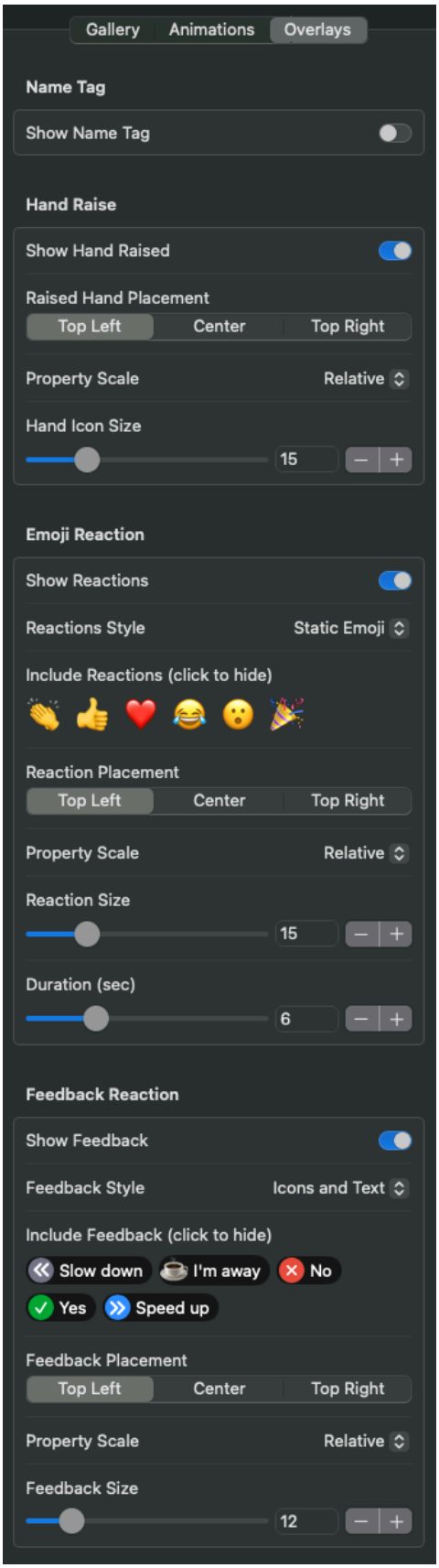
Name Tag allows you to design a custom name tag based on the Zoom participant name, including controls for fonts, colors, and layout.

Hand Raise will trigger an overlay when a participant raises their hand in Zoom. The overlay will disappear when the participant's hand is lowered in Zoom.

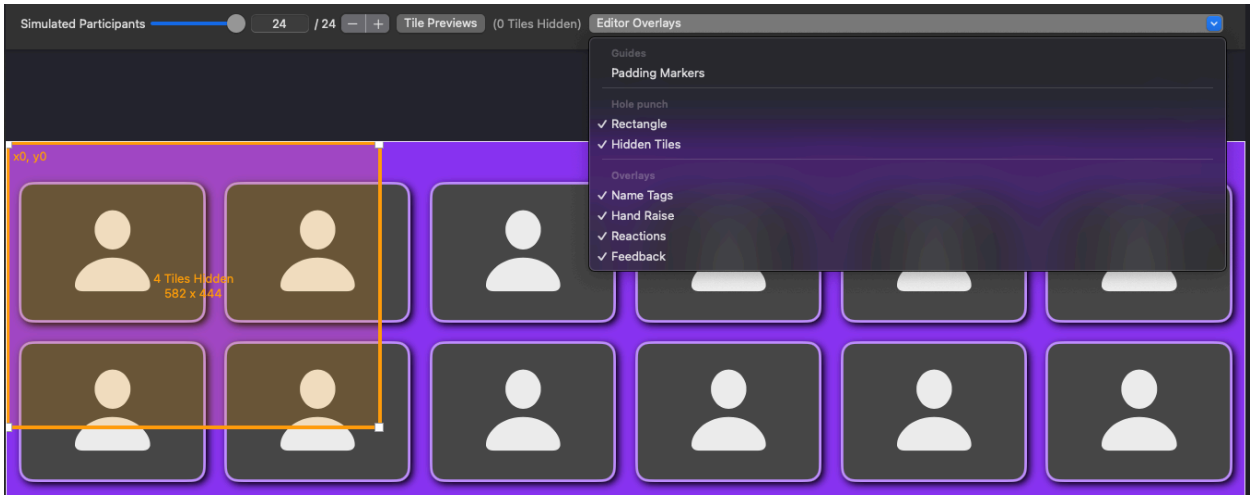
Emoji Reaction will trigger an overlay when a participant selects one of Zoom's default emoji reactions located in the Reactions panel. You can filter the allowed emojis by clicking on the icons, select their placement & size, and control how long the overlays should remain on screen before expiring. Emojis also have an option to present as an animation loop. Hovering over the emoji preview in the Editor Tab will play the animation when using Animated Emoji mode. Animated emojis will also preview in the previsualization in the Editor Tab. Running many animated emojis at once is computationally expensive and not recommended. Use static emojis if the audience will be running emojis in coordination for now.

Feedback Reaction will trigger an overlay when a participant activates one of the Zoom feedback options located in the Reactions panel. You can control the style (Icon and text, icon only, or text only), filter for which feedback options will be displayed by clicking on the icons, and control the size and placement of the overlays. The overlay will disappear when the participant ends the feedback in Zoom.

Each overlay also has an independent setting for its Property Scale. Relative mode will scale the overlay with the size of the tile. Absolute mode will keep the overlay the same size regardless of the size of the tile. While Relative mode is helpful for design consistency, Absolute mode can ensure readability of the overlays regardless of the number of tiles shown in a gallery, which may impact their size.



Previsualization



The center of the Editor window is a preview of the design created with the Gallery Editor along with simulation controls to previsualize the gallery under various circumstances.

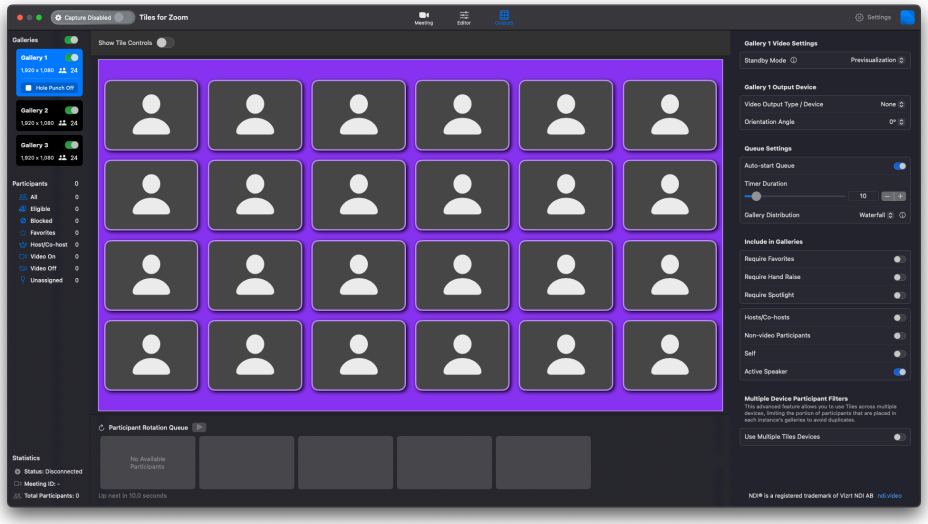
It is possible to preview how a design will look if fewer than the maximum number of participants are available using the Simulated Participants slider at the top. In addition, if any tiles are actively hidden by the Hole Punch feature when it is ON, the number of hidden tiles will be displayed.

The Tile Previews button opens a menu from which you can toggle the participant silhouette icon (default) or a folder of Custom Images to use as the participant previews while in previsualization mode. These previews can be images or GIFs. For the system to read your images, you must name them with numbers (1.png, 2.gif, 3.jpeg, etc.). If you would like to preview background segmentation, name the foreground image the same name as its corresponding background and include 'a' at the end of the image name. (ie. 1.png and 1a.png).

There are several Editor Overlays that can be used to enhance the previews. Padding markers also give an indication of available margin and can be routed to the live output if desired. The interactive Hole Punch overlay can be configured from this drop down. Finally, the overlays for Name Tags, Hand Raise, Reactions, and Feedback can also be previewed from this menu.

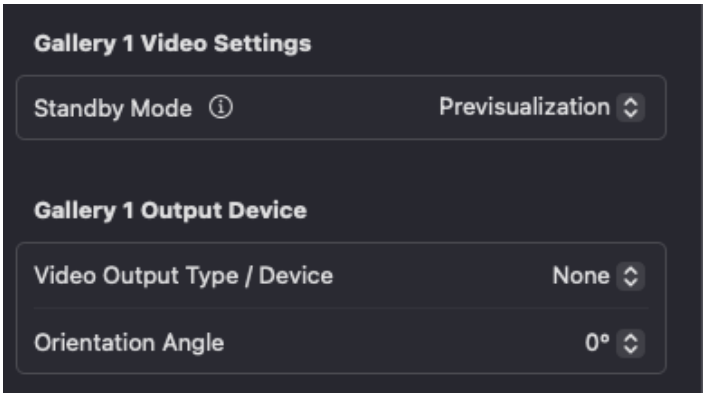
Outputs Tab

The Outputs Tab is where you will route the galleries to system displays, NDI, or Blackmagic devices. You can also monitor the queue and organize the participants with moderation tools.

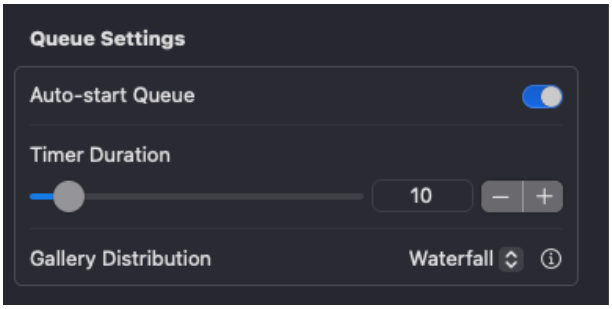


Output Settings

On the right side of the Outputs tab are the routing and behavior controls. Standby Mode determines what should be routed to the selected Output with the Capture Engine is Disabled, and by default it will pass-through the Editor Previsualization.

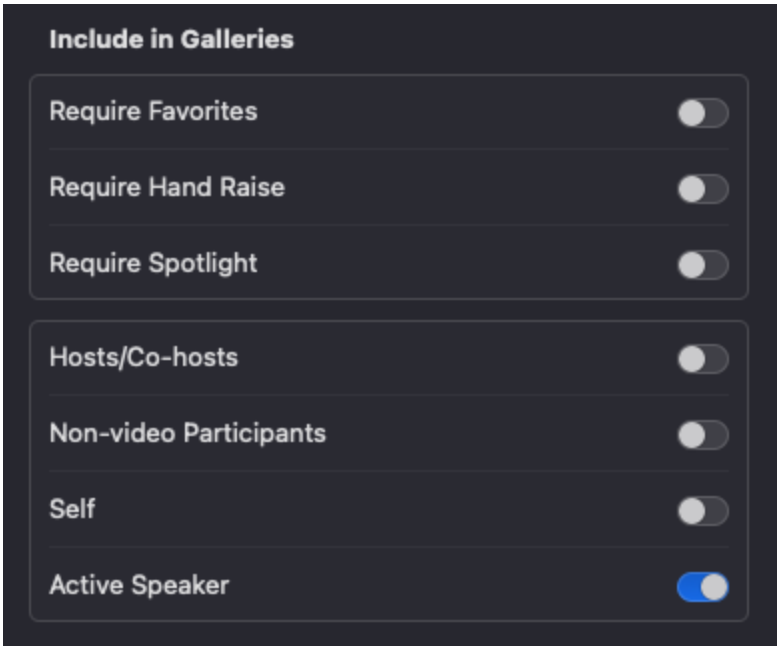


The Output Device section provides controls for sending the selected Tiles output to a device. The orientation of the output can be changed in this location so that, for example, a portrait output being routed to a television rotated to a vertical orientation could be correctly displayed in the Tiles app while also being rotated into a landscape orientation so it appears correctly without letterboxing when physically rotated with the screen back to portrait.

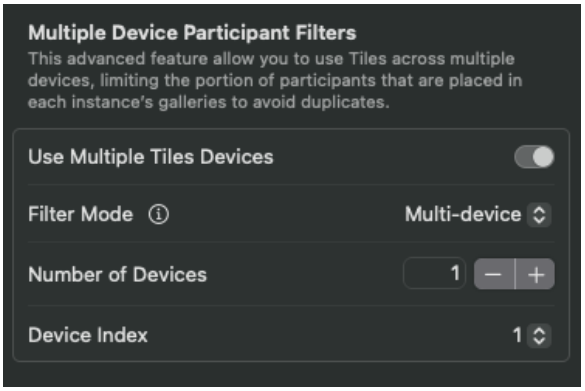


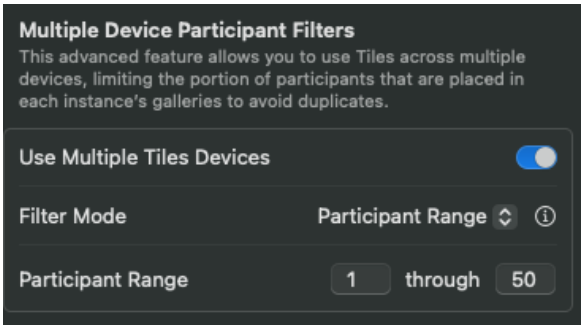
The Queue Settings has a timer that can be set to determine when participants should be replaced and how to distribute them across the galleries. These settings apply to all galleries, not just the one selected on the left side of the app.

Include in Galleries contains a list of filters that can control who is eligible to appear in a gallery. These settings are global to all galleries. The Require category will make a participant ineligible for appearing on any gallery if they do not meet the criteria of the filter. For example, selecting Require Favorites will make any participant who is not a Favorite ineligible for appearing in a gallery. The other filters will determine if a participant who meets the criteria should or should not be included in the galleries. For example, disabling Hosts/Co-Hosts will prevent these participants from appearing in the galleries.



These settings create powerful filter combinations. For example, if you want to only show participants who have their hand raised in Zoom, but exclude the Active Speaker, you can turn on the Require flag for raised hands and turn off the Include flag for active speaker.

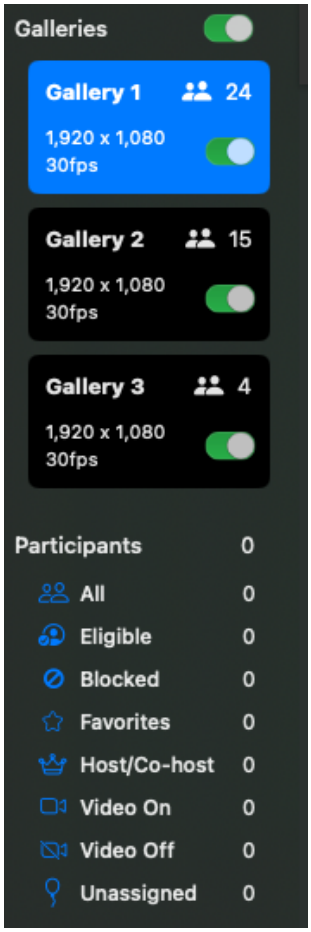




Located at the bottom of the Output settings area, the Multiple Device Participant Filters feature allows multiple computers to be used simultaneously with Tiles instances running on each to split the rendering load and avoid duplicate participants across the computers and displays. When enabled, each Tiles instance will apply a filter for a unique subgroup of participants in the meeting to work with.

Multi-Device mode divides the total number of participants by the number of Devices, and then Device Index will be the segment of the list that this Tiles instance will use. In Participant Range mode, you can manually enter a range of participants to use. You must enable this setting on each computer used in the system and configure appropriately so a unique range for each computer is used.

Outputs & Categories

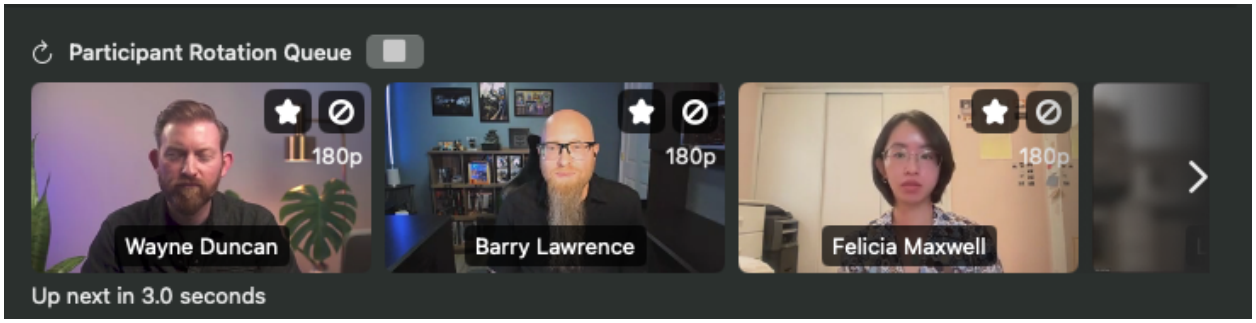


Each Output can be previewed by selecting it from the Gallery Cards list. See the Editor Tab documentation section for more details on Gallery Cards.

The Participants Categories sort the members of the meeting by their role or status. It can be useful to look at these categories to determine if certain participants should be added to or removed from the Participant Rotation Queue. This is also a convenient location to manage Favorite and Blocked participants.

The Eligible Participant Category indicates the list of participants who may be displayed on Galleries because they meet the criteria set by the filters, including the Multiple Device Participant Filters feature, if used.

Participant Rotation Queue



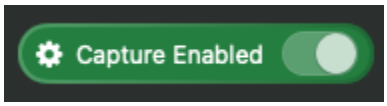
Located at the bottom of the Outputs Tab, the Participant Rotation Queue is a list of “up next” participants. If the number of meeting participants exceeds the maximum number of participants you set for all your displays combined, these additional participants will appear in the Participant Rotation Queue. It can automatically cycle using the Play/Stop controls. Participants will be added to the Gallery Outputs in the order that they appear in the Queue. For example, if non-video participants are excluded from displays, and an on-screen participant turns off their camera, they will be “backfilled” using the leftmost participant in the queue list.

Output Preview

The Output Preview shows the live video that is going to the output. It also has the option of displaying several overlays that can help with moderation and control.

If Show Tile Controls is disabled, these control overlays only appear when hovering over a tile. If it is enabled, some key overlays appear persistently and others display on hover. The Favorite feature locks a participant on screen and excludes them from being eligible for automatic rotation via the queue. The Block feature immediately removes the participant from the display. The red timer corresponds to the Participant Rotation Queue, indicating which tile will next be exchanged for a new participant. The Replace feature opens an interface where you can search for, preview, and select a replacement participant.

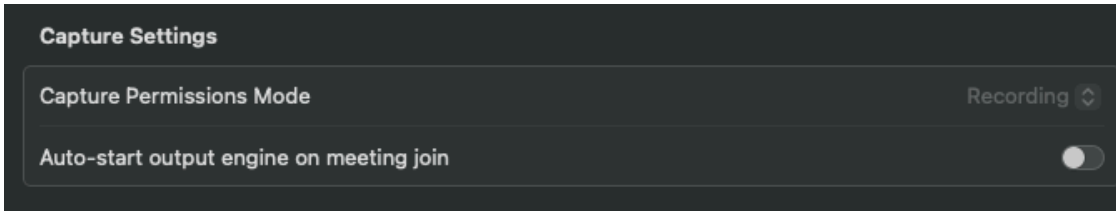
Capture Engine



The Capture Engine controls the flow of participant video feeds from Zoom into Tiles. Enabling this toggle allows the remote participants from Zoom to populate the customized galleries created by Tiles.

Understanding Capture Mode

Capture Mode is selected via the Application Settings window, which can be opened by clicking on the gear icon on the Capture Engine toggle.



Capture Mode is a choice that allows you to define how Tiles will get permission to obtain the raw video and audio streams of the Zoom participants. The choice of Capture Mode is an important part of accurately reflecting the purpose of the raw data access and gaining the permission to use it. At this time, two Captures Modes are supported:

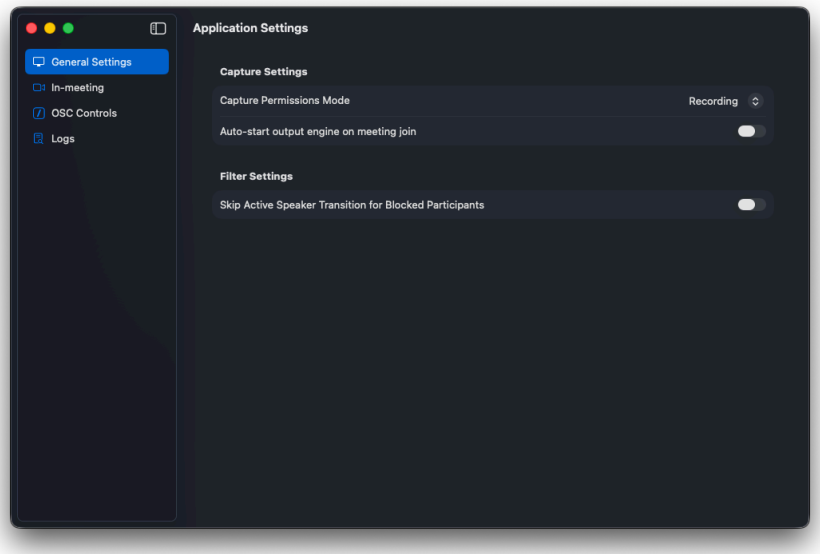
1) Recording (default) - The meeting will use Local Recording permissions and notifications. Participants will get a notice that the meeting is being recorded. Local recording must be enabled for the call in order for this Capture Mode to work properly. Using Recording Capture Mode will not actually record the call inside of Tiles. This Capture Mode is not available when Cloud Recording is active.

2) Live Stream - The meeting will use Live Streaming permissions and notifications. Participants will see a badge that will provide information on Tiles' ability to capture and export audio and video content from the call. This Capture Mode is not available in Breakout Rooms.

Petitioning the Host

If you attempt to start the Capture Engine without the necessary permission for the selected Capture Mode, and you are not the host of the call, Tiles will invite you to request the required permission from the host. If you trigger this request, the host will receive a pop-up asking them to grant the requested permission. If the host accepts the request before it expires, Tiles will start the Capture Engine

Application Settings



The Application Settings window can be opened by clicking the Settings button at the top right of the main Tiles window. There are two sections for settings, accessed via navigation on the left-hand side of the Application Settings window. Logs can also be accessed and exported via a tab on this panel.

General Settings

The General Settings contain controls for the Capture Engine and Filters.

Capture Permissions Mode allows you to toggle between the Recording and Live Streaming modes to trigger consent for capturing participant video streams. You can also set the output pipeline to start automatically when joining a meeting. See the documentation section “Understanding Capture Mode” for more details.

The Filter Settings currently contain a single option for skipping the active speaker transition for blocked participants. This new setting is useful when filtering out the Active Speaker from your gallery so that they can be included in a composite stream via an isolated output from other apps like ZoomISO.

In-meeting Settings

The In-meeting Settings section contains controls for adjusting the camera, microphone, and speaker to use with Zoom. This section also has a shortcut to reaching the Zoom settings menu.

OSC Controls

See the dedicated section on OSC.

Performance

Minimum System Requirements

Tiles is supported on macOS 14 (Sonoma), macOS 15 (Sequoia), and macOS 26 (Tahoe). Tiles is only available for Macs using Apple Silicon (M1 or later). The hardware performance requirements to operate Tiles is heavily dependent on the design of the galleries created in the app as well as the output protocols used. Advice on optimization for these settings is available in the sections below.

Generally, for galleries that will be using a higher quantity of participants or complex designs, animations, and overlays, we recommend considering newer generations of processors such as the M3 and M4 generation as well as the higher-end chip processor models such as the Pro and Max options. We currently do not see significant performance improvements on Ultra series processors compared to Max when using Tiles.

We recommend treating the computer running Tiles like an appliance. We advise against running other applications at the same time as Tiles to ensure that sufficient resources are available to the rendering process, and recommend industry-standard practices around using general purpose computers in live production environments (such as deeply testing exact use case configurations ahead of time, carefully evaluating OS updates in advance, etc.).

Editor Performance Considerations

Enabling more effects in the Editor tab can impact performance, especially as the number of tiles on each Gallery increases. For example, enabling all of the overlays and idle animations will result in higher overhead than a static grid. Animated Emojis are also expensive to trigger. Be sure to utilize the in-app previsualization options to build and test your target design on the hardware you plan to use it with to validate the performance of your system.

Output Performance Considerations

Each of the options under “Video Output Type / Device” may have a different impact on the performance of Tiles. For example, NDI requires compression of raw video data whereas Display can simply place the video on a system screen, so Display outputs may have less of a performance impact than NDI. We do not recommend using Tiles on systems with DisplayLink devices attached out of concern that these 3rd party display drivers could interfere with Tiles. Tiles will try to prioritize the frame rate of its true application outputs over the in-app GUI and previsualizations, and you may notice visual tearing or other rendering artifacts in local previews as a result.

Zoom Resolution and Bandwidth

Zoom limits the bandwidth downlink from its servers to all client applications, including Tiles. This limit is set to 30Mbps by default. Bandwidth can be increased to 100Mbps by purchasing the Zoom Enhanced Media Add-On and activating the High Bandwidth Mode feature on the meeting owner's account.

In addition, there is a maximum of 250 participants who can be received by a single Tiles client. Tiles will be throttled when it renders more than 250 participants at once, or exceeds the bandwidth allocation, whichever occurs first.

Exceeding these limits will cause the framerate of the participants in Tiles to slow down significantly, or they may become transparent or black. Refer to the following guidelines for bandwidth, ensuring that the total bandwidth across all displays and UI elements of any individual Tiles client is below the downlink limit for your Zoom account:

1080p 60FPS: 8-12Mbps*
1080p 30FPS: 4-8Mbps*
720p 30FPS: 2-4Mbps
360p 30FPS: 1Mbps
180p 15FPS: 0.5 Mbps
90p 5FPS: 0.1 Mbps

**If the High Bitrate feature of Zoom Enhanced Media is off, these numbers will be on the lower end of the range, and vice-versa.*

macOS Adaptive Refresh Throttling

When there is no video motion on any screen connected to the computer running Tiles, the macOS adaptive refresh rate feature can throttle the Tiles video engine in certain rare but possible edge-cases.

To resolve this, the Tiles GUI will be forced to the foreground when the Capture Engine is Enabled, and a small animation present in the top bar of the Tiles GUI will prevent macOS from throttling Tiles via adaptive optimizations.

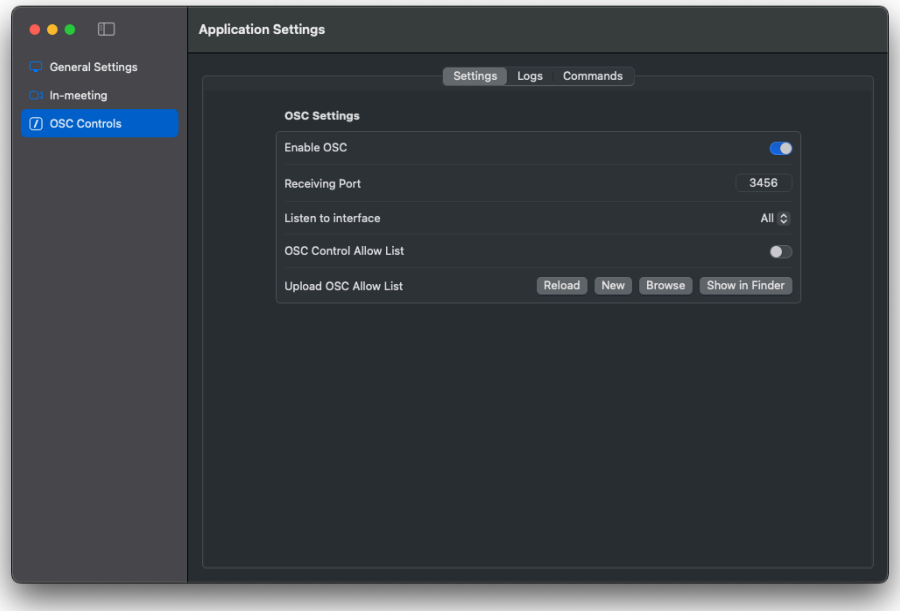
Like many production apps, the Tiles GUI should **not** be minimized for best application performance and should not be hidden offscreen. The option to minimize the Tiles GUI has been removed from the top bar of the app.

Tiles OSC Control

OSC control is available within the Tiles for Zoom application. This API is primarily intended for production use cases and integration with show control for automation. At this time, the OSC API in Tiles is focused on control actions and not meeting data outputs, so it is a one-way command protocol (unlike ZoomOSC, which offers both input and output commands, and will be a better choice for integrations involving Zoom Meeting data).

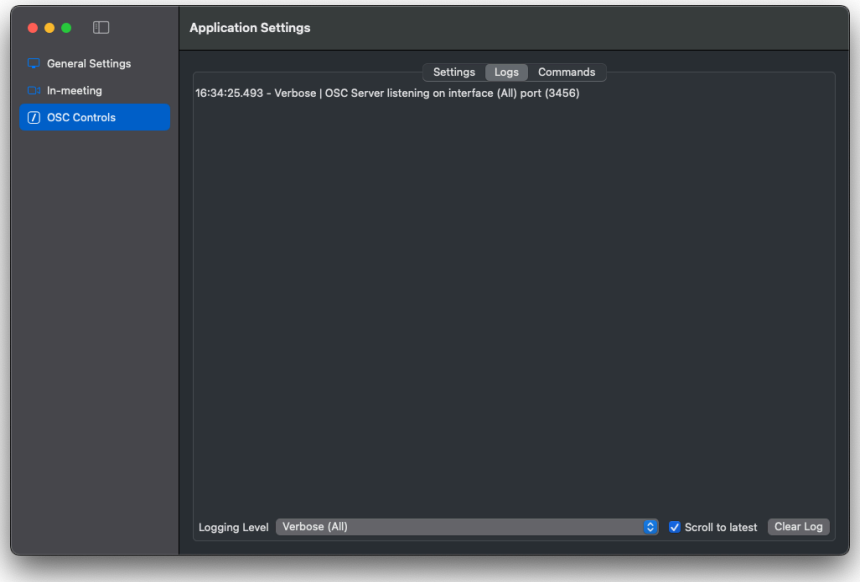
OSC Control Settings

Within the Settings page of Tiles, you may adjust the settings for OSC control by clicking on the OSC Controls tab in the left-hand panel navigation. Below is the main Settings area for OSC:

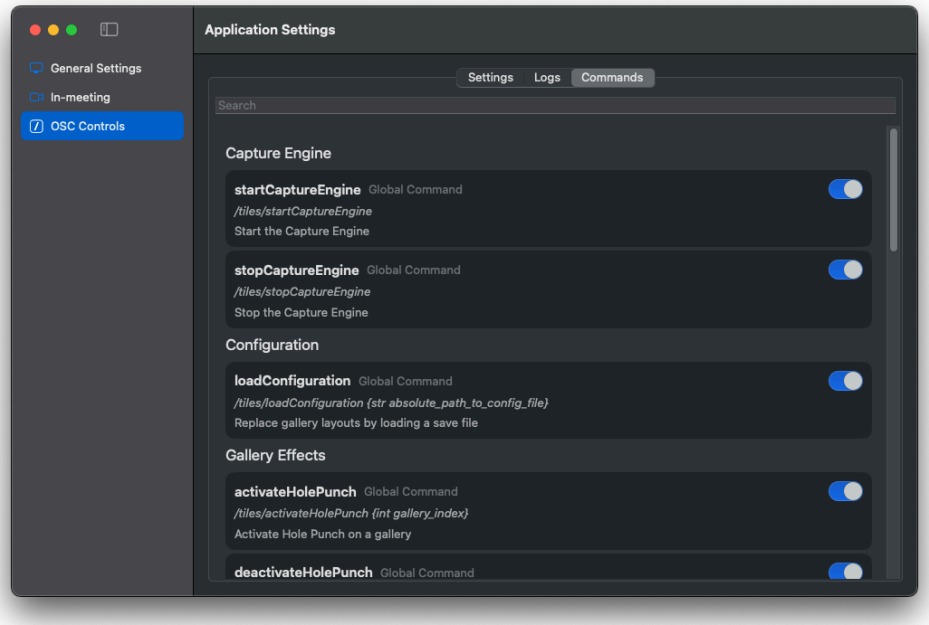


Enable OSC	When enabled, the application will listen for incoming commands
Receiving Port	The local UDP network port where the Tiles will listen for incoming messages
Listen to interface	Select the network interface to use for incoming commands, or “All” for all interfaces.
OSC Control Allow List	Restrict which devices are allowed to send OSC commands to Tiles via a list of IP addresses. Tiles will only allow control from these IPs on the selected interface(s).
Upload OSC Allow List	Configure a .txt file containing the IP addresses to use for the Allow List, one per-line.

The Logs tab of the OSC Controls Settings will display helpful information about the incoming OSC traffic. There are different Log Levels available to help filter the messages:



The Commands tab of the OSC Controls Settings will display an interactive browser for commands available to use with Tiles, along with information about the syntax and functionality of each command. In addition, a toggle on the right side of each entry will allow for a command to be enabled or disabled, which can be used to restrict specific features while still offering other commands to function.



Syntax Guidance

- OSC data is expected to be transmitted as UDP network traffic
- camelCase will be used in the documentation, but should not be enforced by the protocol, for example: zoomtiles, zoomTiles, and zOoMTiLeS should all be equivalent.
- OSC commands are implemented in multiple parts, but only two will be documented as the rest are inferred by the implementation of the OSC spec itself based on these two:
    - An OSC address is the slash-deliminated part of an OSC message
    - The OSC payload is the list of arguments that follow after the address
- A single whitespace will be used in the documentation to separate an OSC address from its payload argument(s)
- The use of "quotes" in the article may indicate a string parameter, but the quotes are not expected to be inside the actual strings received by the software
- The application will allow UTF-8 characters in command strings
- The use of ../ indicates that there are unspecified components of the address before the shown component
- The use of ... indicates that there are unspecified arguments included in the payload
- If 'bool' is written in the documentation, it refers to an unsigned integer where 0 indicates False and 1 indicates True
- All lists should be 1-indexed, e.g. the first gallery would have index 1 (not 0)
- If 'str' is written in the documentation, it means a UTF-8 string
- In the command tables, the arguments in a payload will be separated by commas

Inputs

Inputs are commands received to Tiles that are sent by 3rd party apps. There are 2 types of input commands:

1. User Targeted Commands
2. Global Commands

All input command addresses must begin with /tiles

User Targeted Commands

Targeted Commands operate on specific users

/tiles/target_type/user_command

Target Types for Address

A target type (to be used in the place of target_type in the above template) specifies which format will be used to specify the Zoom participant to operate the command upon. The valid target types are::

../userName - you will specify the participant by their Zoom username
../tileIndex - you will specify the participant by the index of a tile they occupy

Target Payload Arguments

Commands that use a target type in the address have certain requirements for the first argument in the payload of the OSC packet

- **Commands using ../userName will use a string-type first argument**
  Example: /tiles/userName/block "Andy Carluccio"
- **Commands using ../tileIndex will use two unsigned integer arguments, the first specifying the gallery index and the second specifying the tile within that gallery**
  Example: /tiles/tileIndex/block 1 7

The target type along with target type arguments need to be specified first followed by the user specific command arguments (if applicable).
Examples with ../replaceByName and ../replaceByIndex:

- /tiles/userName/replaceByName "User 1" "User 2"
- /tiles/tileIndex/replaceByName 1 2 "User 1"
- /tiles/userName/replaceByIndex "User 1" 1 2
- /tiles/tileIndex/replaceByIndex 1 2 1 3

Global Commands

Global Commands operate on Tiles itself and thus do not have any user targets

/tiles/global_command

OSC Command List

Tiles Input Commands

Remember that all commands below must take their target argument before the command-specific arguments are specified. If the payload column is empty, that means that only the target argument is required.

Commands (User Specific)

Address	Command Payload Arguments	Category	Description
../block		Management	Block the participant
../favorite		Management	Favorite the participant
../unBlock		Management	Unblock the participant. **Note that selection by tile index cannot be used for this command.**
../unFavorite		Management	Unfavorite the participant
../replaceByName	str user_name_backfill	Management	Replace the target participant by providing the username of their backfill.
../replaceByIndex	int gallery_index_swap, int tile_index_swap	Management	Replace the target participant by providing the location of a tile to "swap" with.

Input Global Commands

Commands (User Specific)

Address	Command Payload Arguments	Category	Description
/tiles/joinMeeting	str meeting_id, str password, str display_name	Join Flow	Join a meeting via parameters
/tiles/zakJoin	str zak, str meeting_id, str name, [optional] str password	Join Flow	Join a meeting with a ZAK token and meeting parameters
/tiles/startPMI		Join Flow	Start the user's Personal Meeting

/tiles/startIM		Join Flow	Start an Instant Meeting for the user
/tiles/leaveMeeting		Join Flow	Leave the current meeting
/tiles/startQueueTimer		Management	Start the queue timer
/tiles/stopQueueTimer		Management	Stop the queue timer
/tiles/enableGallery	int gallery_index	Gallery Effects	Enable the gallery
/tiles/disableGallery	int gallery_index	Gallery Effects	Disable the gallery
/tiles/activateHolePunch	int gallery_index	Gallery Effects	Activate the Hole Punch (the Hole Punch feature must be enabled for this command to apply)
/tiles/deactivateHolePunch	int gallery_index	Gallery Effects	Deactivate the Hole Punch (the Hole Punch feature must be enabled for this command to apply)
/tiles/startCaptureEngine		Capture Engine	Start the Capture Engine
/tiles/stopCaptureEngine		Capture Engine	Stop the Capture Engine
/tiles/loadConfiguration	str config_file_absolute_path	Management	Replace gallery layouts by loading a save file