

## Zoom Best Practices

This document is meant to provide an overview for using Zoom, a video communications tool Carnegie Mellon University offers. This overview contains resources and tips on how to conduct and participate effectively in online meetings and will help you get the most out of your Zoom experience.

### Zoom Options: Meeting vs. Webinar

The meeting and webinar platforms offer similar features and functionalities but have key differences. Use Zoom meetings for collaborative events with all participants being able to turn on their video and audio, see who else is in attendance, and screen share. All students, faculty and staff have access to a CMU Zoom license with your Andrew userID and password plus unlimited meeting time with up to 300 people.

Zoom webinars are designed so that the host and any designated panelists can share their video, audio and screen with view-only attendees. Attendees have the ability to interact via Q&A, chat, and answering polling questions. The host can also unmute the attendees to speak as needed. The webinar platform is more controlled compared to the meeting platform, but there is less audience interaction with a webinar. With the webinar option, can host events for up to 10,000 participants. CMU Media Services has a Zoom webinar license and can provide support for both meeting and webinar platforms. Here is a link to their online request form:

[https://cmu.service-now.com/helpatcmu?id=req\\_it&sys\\_id=159059bd1bc05810830a4377cc4bcb55](https://cmu.service-now.com/helpatcmu?id=req_it&sys_id=159059bd1bc05810830a4377cc4bcb55).

## Table of Contents

<b>Zoom Meeting</b> .....	2
Setting up a Zoom meeting.....	2
Zoom programming tips .....	3
Optimal video experience tips .....	4
Additional Zoom features .....	5
<b>Zoom Webinar</b> .....	7
Executing a Zoom webinar.....	7
<b>Zoom Security</b> .....	8
Zoom security tips: .....	8

## Zoom Meeting

### Setting up a Zoom meeting:

- It is highly suggested you have a host and co-host for each meeting. In the case a connection failure happens, someone else can step in for a smooth transition. If the host needs to leave the call, the co-host can take over to keep the meeting going. If there is no co-host and the host leaves, the meeting will end for all participants.
- Select to turn off participants' webcams when joining the meeting (see screenshot I below). Participants will have the option to start their video in the meeting.
- Select to mute participants upon entry. Participants will have the option to un-mute during the meeting.
- Select both telephone and computer audio to allow participants options for meeting participation (reference screenshot I below).
- Schedule a test Zoom with key players prior to your scheduled meeting with presenter (host), moderator, co-host, and additional colleagues to be the audience and review the meeting, slides, discuss roles and tasks, and test the Q&A with the **Chat** feature, **Raise Hand** feature and review video preferences (reference screenshots II and III below).

### Screenshot I: How to turn off participant's videos

#### Personal Meeting ID Settings

Personal Meeting ID  
802-143-1214

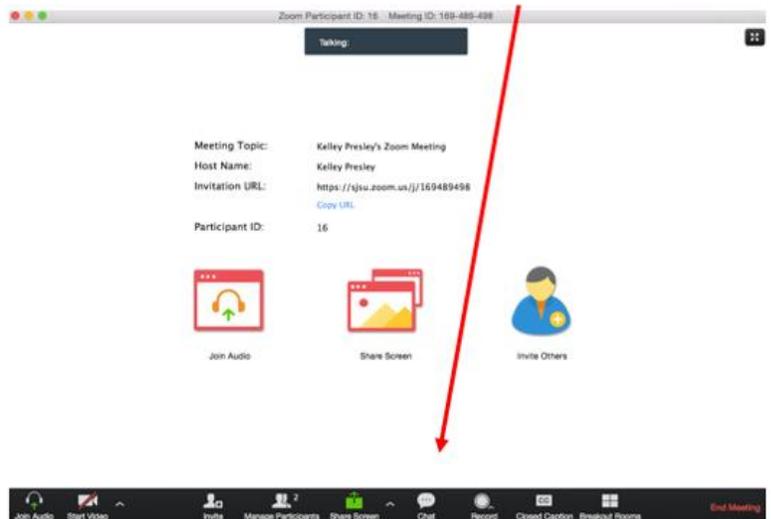
Password  
 Require meeting password

Video  
Host:  On  Off    Participants:  On  Off

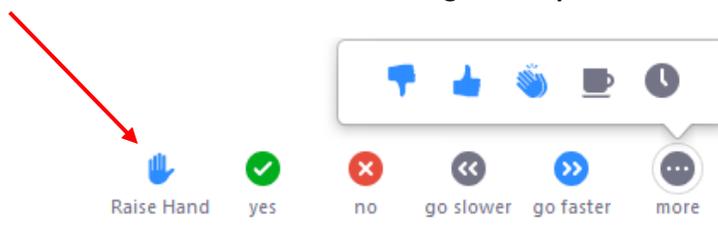
Audio  
 Telephone     Computer Audio     Telephone and Computer Audio

Dial in from United States [Edit](#)

### Screenshot II: Chat Feature



### Screenshot III: Manage Participants Tools



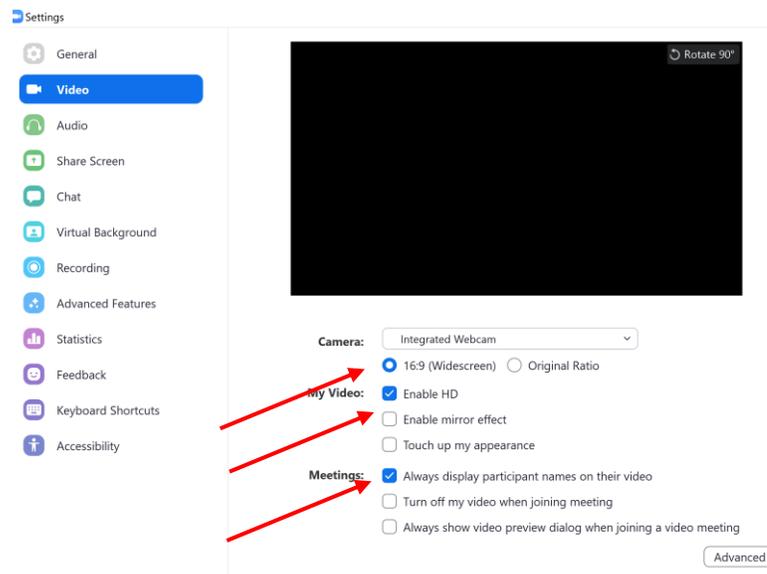
## Zoom programming tips:

- If executing Q&A during the meeting, you'll need a strong moderator to facilitate and track questions for the host.
- Moderator best practices:
  - Moderators need to have the ability to know what's going on within the online conversations, the questions that are coming in as well as keeping track of audience throughout the entire session.
  - Start the meeting by reviewing housekeeping items with accompanying welcome/housekeeping slide, such as -
    - Providing timing updates to the group, for example, three minutes before the meeting starts, something like "Thank you all for joining, we will get started in three minutes."
    - Start meeting on time and provide an overview of the meeting layout -
      - "You all have been muted. In the event that you are asked a question, please remember to unmute yourself and then when you are done speaking, please remember to mute yourself again to limit background noise and keep the conversation going."
      - Be clear on the meeting format and when/if questions will take place. For example, "The presenter will go through a slide deck and then questions will be at the end of the session." Encourage questions to be entered in the **Chat** window, asked via the **Raise Hand** feature, or be pre-submitted to an email address.
      - "If there is a clarifying question during the presentation, please use the **Chat** feature and then during the Q&A discussion, either use **Raise Hand** or **Chat** (up to the host/moderator's preference) and the moderator will take the lead to go through all questions."
    - Recommending speaker view as viewing option
    - Invite guests to use their video function, especially during Q&A
    - Turn off your video and/or virtual background if you are experiencing lag or quality issues as it takes up more bandwidth and could interfere with the connection
  - If there is too much interruption happening, the first break in the conversation is the best moment for the moderator to suggest that people refrain from speaking up when someone is talking and to use the **Chat** feature to address any questions.
  - Should there be unknown background noise at any time during the meeting, the host, or co-host can mute everyone in the **Manage Participants** feature.
  - The **Chat** feature is essential, as the moderator can follow messages and step in and say something like "I see that there are already a few comments and questions, XX wants to know about XX. XX (host) what do you think about that?" Or, if there are quick clarifying questions that you might need to interrupt the presentation to address.
    - If the **Chat** feature is being used for questions, consider having a helper pull all of the questions out of the **Chat** and prioritize them by highest to lowest

- priority. Share them with a moderator in a Google Doc to make it a smooth review process and then address with the group.
- If using both the **Chat** and **Raise Hand** features for Q&A with a large group, it would be best to have a helper monitor both the **Chat** and the **Manage Participants** features to be aware when someone raises their hand or comments/asks a questions, as it could become overwhelming for the moderator alone.
  - The host can control whether participants can chat with everyone, or with the host only. At the bottom of the in-meeting Zoom Group Chat window, click **More**, and then choose an option for **Allow attendees to chat with**.
  - Towards the end of the meeting, provide a timing update to the group. For example, “We only have a few minutes left for this meeting. If there are other questions that you didn’t get to ask, please use the **Chat** window. If we were unable to address them in this meeting, we will follow up offline.”
  - The moderator should turn it back to the host at the end to provide attendees with final remarks, after the Q&A session wraps up. It should be a compelling closing to end concisely.
- Speaker best practices:
    - Make sure to check the frame so that nothing is cut off in meeting view.
    - If reading from remarks, it’s optimal to have your own “confidence monitor” so you are not looking down and can still make eye contact with your webcam. This would mean having two screens with remarks on one and the meeting on the other, or simply taping up printed remarks and set near camera.
    - When speaking, aim for clear articulation, steady pace, and at a lower volume near the microphone. Test your microphone in your audio settings prior to the meeting.
    - Try to use your best radio announcer voice and keep a high level of enthusiasm and energy throughout the session.
    - If you are used to presenting standing up, try standing and elevating your camera and computer to provide similar feel to an in-person presentation.

## Optimal video experience tips:

- Make sure you have the right aesthetic environment -
  - Lighting should be bright, even and preferably coming from in front of you (never behind you to avoid casting a shadow on your face).
  - Your background should be interesting, but not too distracting.
  - Elevate your camera so it’s at eye level, so you are not looking down at it. To make eye contact, look at your webcam instead of your screen.
  - Test the camera position in your video settings prior to joining the meeting.
- Other video settings to consider for ideal video results are below. You must click **Video Settings** under the **Start Video** tab for these settings to appear (reference screenshots below).
  - In **General Settings**, select **Use Dual Monitors** if you have more than one monitor. This allows you to make eye contact while also viewing the questions and presentation files.
  - In Video settings, select **16:9 widescreen**, **Enable HD** for better screen quality, and **Always display participant name on their videos**.



## Additional Zoom features to consider using:

- Mute your audio and turn off your camera by default -
  - To do it, go to **Settings > Audio > Mute microphone when joining a meeting**, and then **Settings > Video > Turn off my video when joining a meeting**.
- Turn on gallery view -
  - Gallery view lets you see everyone in the meeting at once, instead of just the person speaking. To turn on during a meeting, click the tab that says **Gallery view** in the top right corner. If the meeting has 49 or fewer attendees, you'll see all of their screens displayed on one page. If there are more, you'll have the option to move between multiple pages. Change it back by clicking **Speaker view** in that same top right corner.
- Hide non-video participants -
  - On a larger call, your screen can get cluttered with participants, which can be distracting, especially if some don't have their cameras on. Hide the participants who aren't using video by going to **Settings > Video > Meetings**, and check **Hide non-video participants**.
- Share your screen -
  - Share your screen for a Zoom meeting with other participants by clicking the **Share screen icon** on the toolbar at the bottom of the meeting screen. You'll have the option to share your entire desktop, or just one of the windows you have open. Click the red **Stop Share** button at the top of the screen to go back to being a normal participant in the meeting.
- Record the meeting -
  - Select if you want to record the meeting automatically (locally or to cloud). Always click **Save to Finish** after recording. You should record a meeting if participants are unable to attend, so you can send them the video afterwards.
  - To enable local recording, go to **Settings > Recording**, and toggle it on. When you're hosting a Zoom meeting, click the **Record** icon on the bottom toolbar.

As of May 22, 2020

- If you plan on posting recorded sessions online, you should have recordings captioned per CMU's accessibility protocol. Reach out to [Media Services](#) or [University Events](#) to help provide assistance with this process.
- **Raise Hand -**
  - Questions can be taken via the **Raise Hand** feature to keep the meeting more interactive. Hands will go up in order they were raised in the **Manage Participants** feature, so the moderator can start from the top and work their way down the list of hands. Once you call out a participant who has their hand raised and they speak, you can then go in and **Lower Hand** in the **Manage Participants** feature to move on to the next person.
- **Breakout Rooms –**
  - **Breakout Rooms** allow you to split your meeting in up to 50 separate sessions. The host can choose to split participants into these separate sessions automatically or manually, and can switch between rooms at any time.
  - Only the host of the meeting has control to launch **Breakout Rooms**. The co-host has the ability to see the room assignments and can join any room, but not launch them.
  - You can pre-assign attendees to rooms prior to the meeting in your account settings or create breakout rooms during your meeting. You can also adjust room assignments after you assign them.
  - To assign breakouts in advance, click on your **Settings**, then under **In Meeting (Advanced)** section, find the **Breakout room** item and select **Allow host to assign participants to breakout rooms when scheduling**. This option will then appear when you go to schedule your meeting and you will be able to manually add names and emails to breakouts or upload an excel with the breakout groups.
  - To assign breakouts during the meeting, click the **Breakout Rooms** icon, then select the number of rooms you'd like to create as well as how you would like assign participants (automatically or manually). You can find more information on how to manage breakout rooms in Zoom, [here](#).
  - The host can limit the amount of time attendees are in the rooms and can also broadcast messages to all groups with updates. Participants can only speak to others in their breakout using the **Chat** feature.
  - The host can move attendees to different breakout rooms mid-breakout session.
  - If you are incorporating breakout groups during your Zoom meeting, it's best to have a slide explain the breakout room process and how it'll work.
- **Polling -**
  - The **Polls** feature allows you to create single choice or multiple choice polling questions for meetings. You will be able to launch the poll during the meeting and gather the responses from your attendees and share during the call.
  - You also have the ability to download a report of polling after the meeting. Polls can be conducted anonymously if you do not wish to collect participant information with the results. More information on polling from Zoom [here](#).

- Virtual Backgrounds –
  - To access all of the CMU-themed Zoom virtual backgrounds, click [here](#).
- Annotation Tools -
  - Use **Annotation tools** to annotate on a shared screen as a viewer. You can also use annotation tools when sharing or viewing a whiteboard. More Annotation tools and tips from Zoom [here](#).
- Mute and unmute with the space bar -
  - When you are called on to speak, you can press and hold the spacebar to quickly mute and unmute your mic.
- Additional Zoom keyboard shortcuts -
  - Zoom has multiple helpful keyboard shortcuts to help you navigate the app on your desktop without using your mouse. Find commands to join a meeting, start or stop recording, enter full screen and share your screen, etc. Check out [Zoom's full list of hot keys and keyboard shortcuts here](#).

## Zoom Webinar

### Executing a Zoom webinar:

- When using the Zoom webinar platform, you can host up to 10,000 participants. Unlike a standard Zoom meeting, participant audio and video can be muted which makes this a perfect option for keynote speeches and panels. This fee-based option includes setup, recording and technical support, working with CMU Media Services. You can set up a webinar using Media Services' license by filling out this [online form](#).
- With Zoom webinar, there is an option to build in a registration page with the option to add custom registration questions. You can also send out email reminders directly from Zoom. These reminders can deploy one week, one day and one hour in advance of the webinar.
- Webinar roles:
  - Panelists are full participants in a webinar. They can view and send video, screen share, annotate, etc. You can have 100 panelists (including the host) in a webinar. Note that panelists will receive a direct email invitation separate from the attendees of the webinar. You should not share your individual panel webinar login, as that login link is specific to each panelist. If you want to share the webinar link, direct guests to the formal registration form. Once registered, they will receive an email notification with a unique join link.
  - Attendees are view-only participants who can be unmuted if the host chooses. Their view of the webinar is controlled by the host. They can interact with the host and the panelists through the Q&A and the chat.
- Set up rehearsals with Media Services to test out all experiences and functions with all panelists and have a colleague join as an attendee to view the webinar to confirm the audience perspective looks good.

## Zoom Security

### Zoom security tips:

- CMU Information Security Office will continue to monitor Zoom developments. We expect new findings and recommendations to continuously be announced.
- Always make sure to update your Zoom app whenever prompted in order for new fixes to be updated as soon as possible. You can also periodically **Check for Updates**. Also, refer to the [Secure a Meeting or Class](#) guidance on the Computing Services site to help you use Zoom as securely as possible.
- CMU Computing Services highly recommends you apply password-protection when scheduling new meetings. This feature automatically assigns a password to meetings you create. The password is included in your invitation and participants must use it to join.
- Never share Zoom join links or Meeting IDs in a public location, such as a web page, bulletin board or newsletter.
- Don't use your Personal Meeting ID for the meeting. Instead, use a per-meeting ID, exclusive to a single meeting. Zoom's support page offers a [video walk-through on how to generate a random meeting ID](#) for extra security.
- Enable the **Waiting Room** feature so that you can see who is attempting to join the meeting before allowing them access.
  - Zoom offers a [support article](#) on **Waiting Room** as well. To enable the **Waiting Room** feature, go to **Account Management > Account Settings**. Click on **Meeting**, then click **Waiting Room** to enable the setting.
- Disable other options, including the ability for others to **Join Before Host** (it should be disabled by default). Then disable screen-sharing for non-hosts, and also the remote control function. Finally, disable all file transferring, annotations and the auto save feature for chats. To disable most of these features, click on the gear-shaped **Settings** icon on the upper-right side of the page after you've logged in. From there, you'll see the option to turn off most of the listed features.
- Once the meeting begins and everyone is in, lock the meeting to outsiders and assign at least two meeting co-hosts. The co-hosts will be able to help control the situation in case anyone bypasses and gets into the meeting.
  - To deputize your co-hosts, go to the same **Settings** icon, then to the **Meetings** tab. Scroll down to **Co-host** and make sure it is enabled. If Zoom asks you for verification, click **Turn On**.
- What to do if someone Zoombombs your meeting -
  - **Hover** your cursor over the bottom of the screen to show the **Zoom meeting Toolbar**.
  - Click **Security** and choose one of the following options:
    - **Enable Waiting Room** — select the **Enable Waiting Room** option to set this feature while in a meeting
    - **Limit Sharing To Host** — **deselect** the Share Screen option **under Allow Participants** to restrict sharing to the host
    - **Disable Chat feature** — click the **Chat** feature, click **More**, and then choose option **Participants can chat with: No One**.

As of May 22, 2020

- **Remove Participant** — click the **Remove** link to the right of any participants you would like to remove from the meeting. This option appears once participants have joined your meeting.
- Note: If the **Security** button does not display in your version of Zoom, from the Zoom client click the Zoom.us menu and select **Check for Updates**. Follow the prompts to update your version of Zoom.
- If you experience Zoombombing, end the meeting immediately and then report the incident to [iso-ir@andrew.cmu.edu](mailto:iso-ir@andrew.cmu.edu).

*Questions? The University Events team is happy to assist with Zoom. Please reach out to [Dani Henderson](#) with any questions.*