

Edelson

PRIVACY NEWSLETTER

As Part of Edelson PC's COVID-19 Task Force



A Message to the Community

The inaugural issue of this newsletter provided information for avoiding various new COVID-19 related schemes as well as general tips to stay safe online.

We realize that people are quickly transitioning to using new technologies to keep in contact with co-workers and family. Therefore, this issue will provide guides (see links below) focusing on usage, privacy, and troubleshooting for the following popular platforms:

- [Zoom](#)
- [Hangouts](#)
- [Skype](#)
- [WebEx](#)
- [Windows Troubleshooting for Mic/Camera](#)
- [Mac Troubleshooting for Mic/Camera](#)

Learn more about our efforts to help consumers and the community during the COVID-19 pandemic at:
<https://edelson.com/covid-19-task-force>

Together, we'll stay strong.

Edelson

IN THIS ISSUE

A MESSAGE TO THE COMMUNITY

GUIDES FOR POPULAR VIDEO CONFERENCE SERVICES

Zoom Guide

Sign Up Process

Zoom is free to use but meetings are limited to 40 minutes for free accounts. Go to <https://zoom.us/signup> and then either select "Sign in" or "Sign up, it's free" if you do not have an existing account.



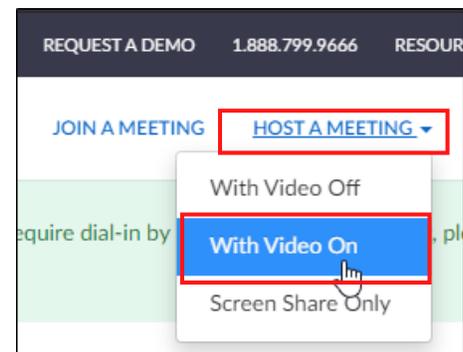
You can access Zoom after you have confirmed your account via a link that was emailed to you.

Note: Zoom has removed the 40 minute cap for free accounts for K-12 schools. After creating your free account, you may need to fill out a [form](#) to remove the restriction for your school if technology staff has not already done so.

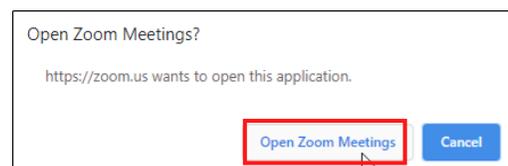
Starting a Video Chat

Visit <https://zoom.us> from your computer and sign in to your account. (These instructions will primarily be for using Zoom with the computer app and web browser but you can also download and use the Zoom mobile app as well.)

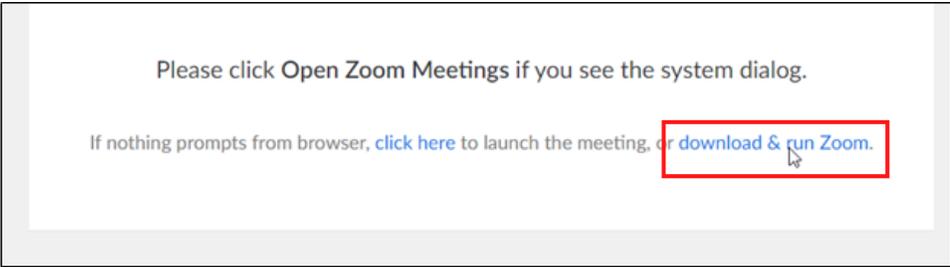
Once signed in, hover over "Host A Meeting" and select "With Video On" to host a video meeting.



Next, select "Open Zoom Meetings."



If you haven't previously installed the Zoom software, you will need to select "download & run Zoom."



Run the installer that is downloaded.

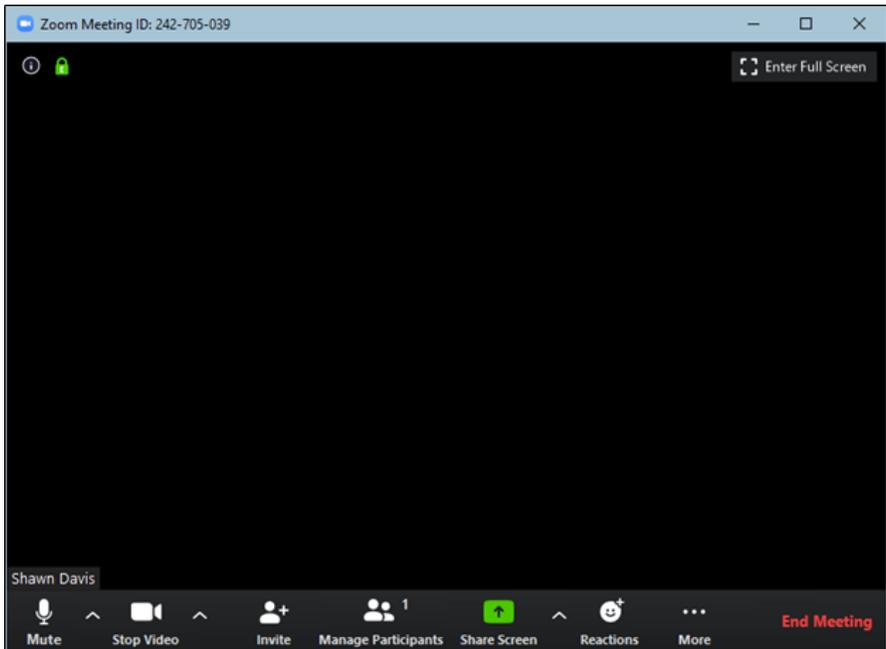
(Note: Attackers are using fake Zoom installers to spread malware so only use the installer from Zoom's site.)



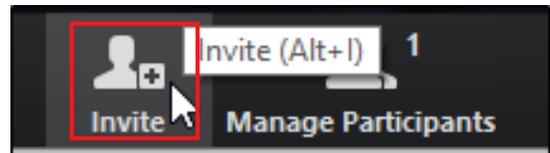
Connect a microphone and speakers or headphones to your computer. Then, select "Join with Computer Audio." (Free accounts do not have the options to join by phone.)



You are now in the video chat:

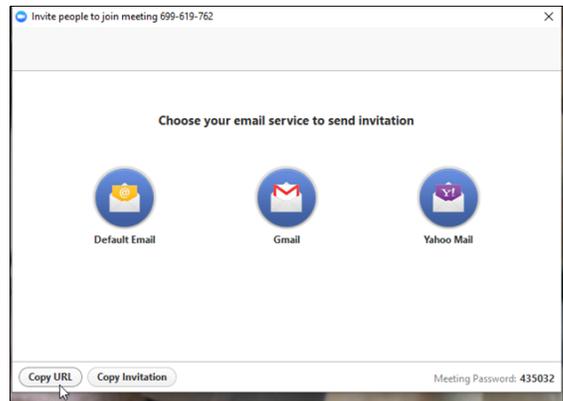


To invite someone to the meeting, select the "Invite button on the bottom bar.

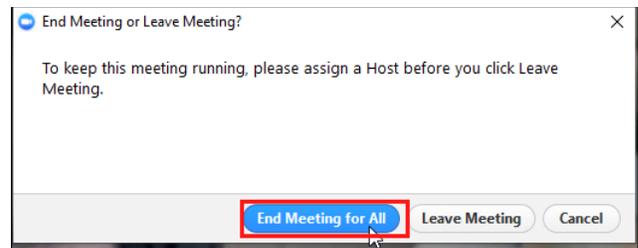
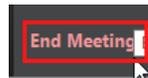


Select your email service to open an email draft with the meeting information.

(You can also use the buttons at the bottom to copy the URL or invitation and provide it to your recipients manually via a chat or email.)



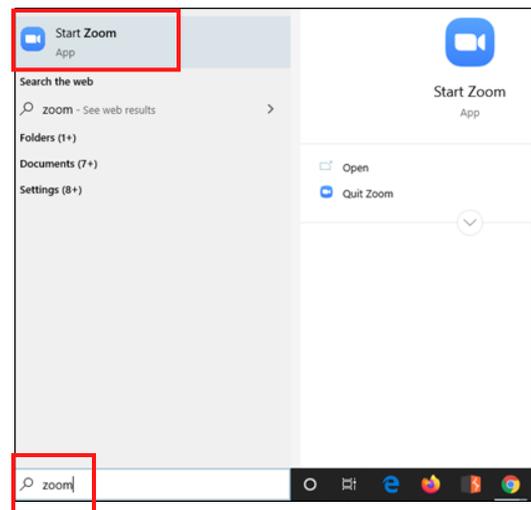
End the meeting by selecting "End Meeting" followed by "End Meeting for All."



Scheduling a Meeting

After installing the Zoom software the first time, you no longer need to use the website to start or schedule a meeting.

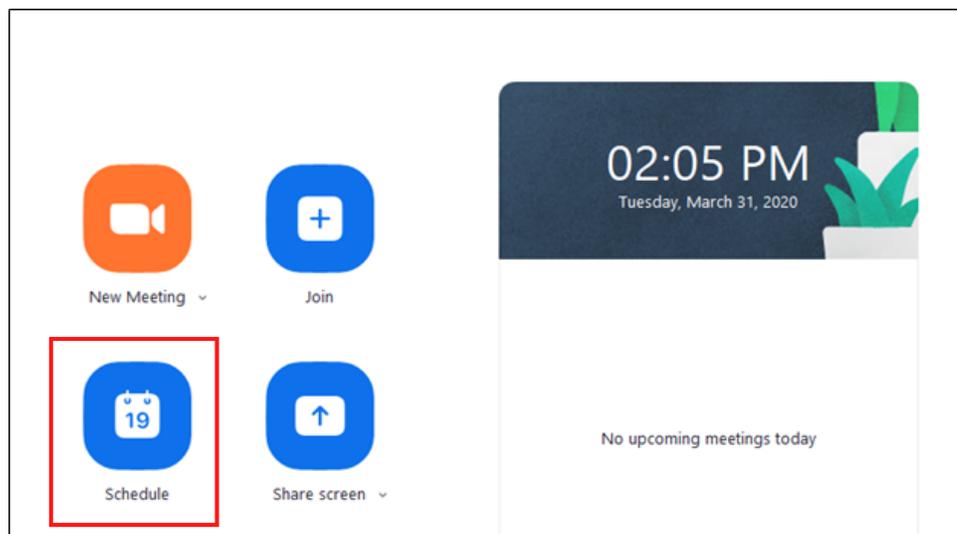
On your computer, search for Zoom and open the app.



If prompted, choose "Sign in" and provide your credentials.



Now, from the app you can schedule a meeting by simply selecting "Schedule."



Privacy Tips

One issue with using Zoom is that with default settings, it may be susceptible to "Zoombombing" which is when unintended recipients join your meeting and potentially share obscene material.

In order to prevent "Zoombombing" there are various settings that can be changed when scheduling a meeting. (The screenshot below shows the default settings.)

While personal meeting IDs are convenient, most Zoombombing occurs due to posting these non-changing IDs online.

To help prevent unauthorized entry, it is recommended to generate a new meeting ID automatically for each video chat.

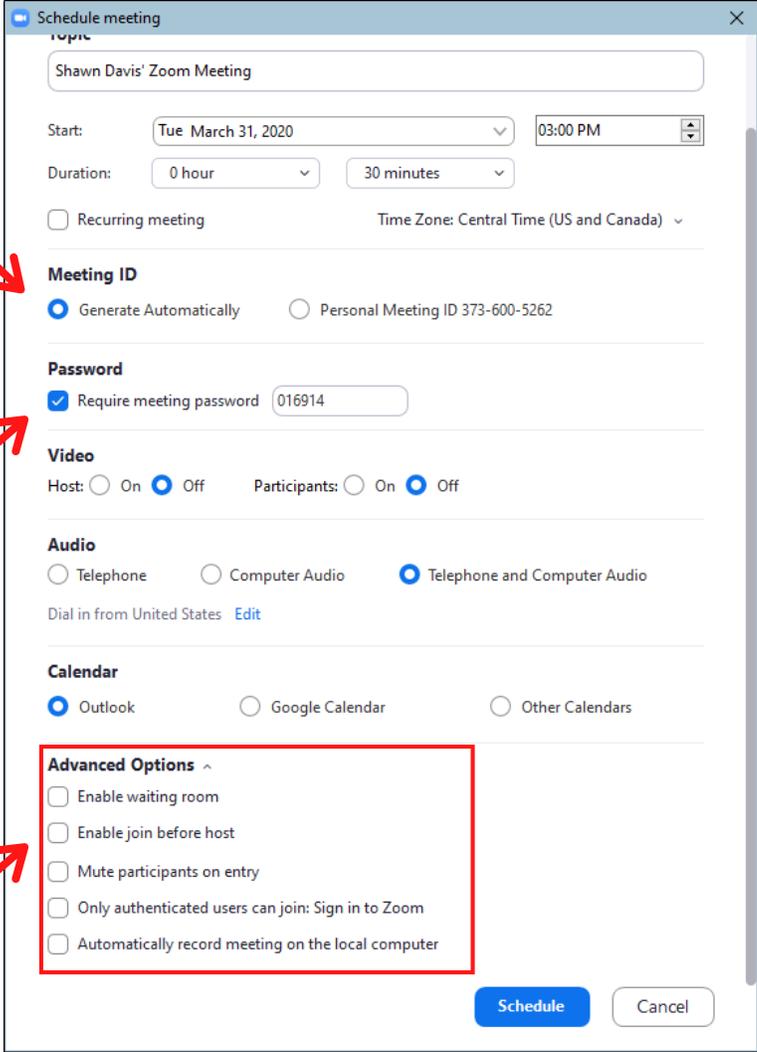
Require a password so that even if an attacker guesses your meeting ID, they will not know the meeting password.

Advanced Options:

Enabling a waiting room allows you to screen participant names before letting them into the call.

To prevent conversations from starting before the call begins, don't select "Enable join before host."

Paid users can select "Only authenticated users can Sign in to Zoom" which will allow the host to restrict the meeting to only those that are logged into Zoom with a registered account (or even to only those with a particular email domain).

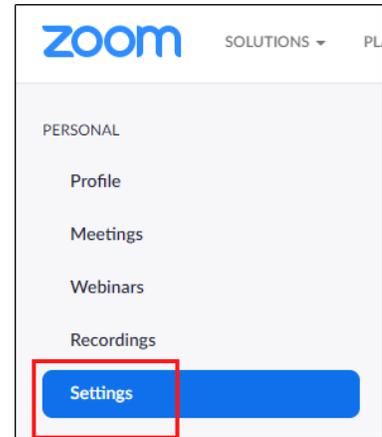


There are additional settings that can be configured before a meeting starts as well through the Zoom website.

Logon to zoom.us and select "My Account."



Under "Personal," select "Settings."

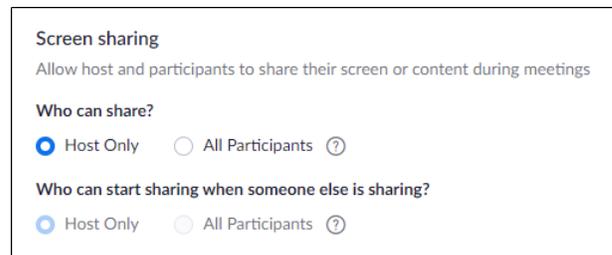


To prevent participants from potentially spreading malware, turn the "File transfer" feature off.

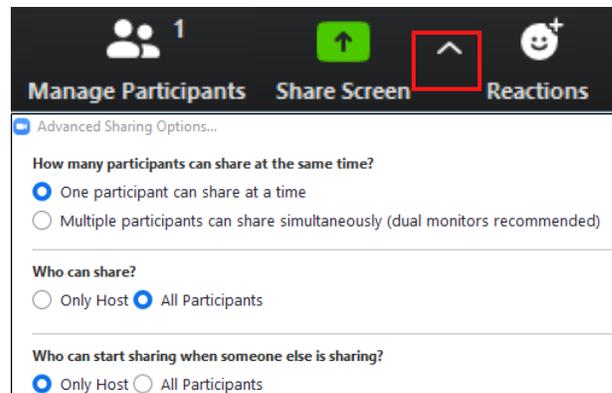


Scroll down to "Screen sharing" which is set to "All Participants" by default. This setting could allow unintended guests to share obscene materials to the group.

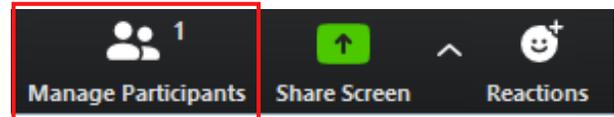
Select "Host Only" to prevent participants from sharing their screens.



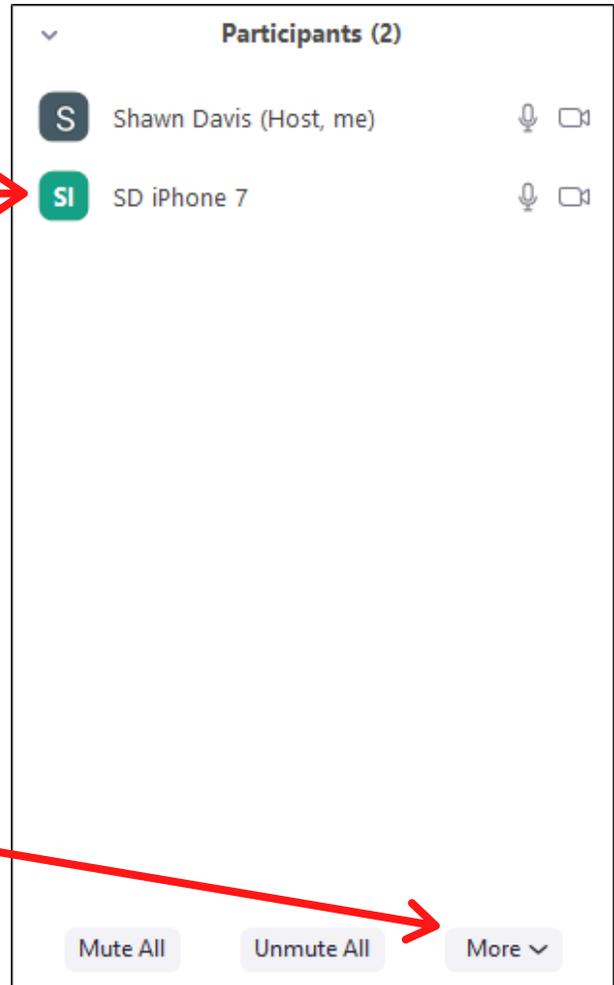
You can decide later during the meeting to allow other participants to share by selecting the little caret up symbol, "Advanced Sharing Options," and then "All Participants" under "Who can share."



Once a meeting is going, you can get rid of unintended participants by selecting "Manage Participants" which brings up a side window.



You can select the participant and "Mute" to cut off their mic. You can also select the participant and "More" in order to stop their video or remove them from the meeting manually.



At the bottom, there is another "More" option which can allow you to:

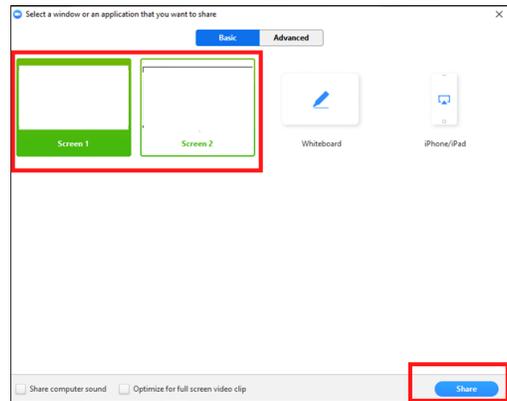
- Mute everyone on entry
- Allow or disallow participants to unmute themselves
- Lock the meeting so that no one else can join

Sharing Your Screen

Once in the video chat, select the green "Share" button on the bottom bar.

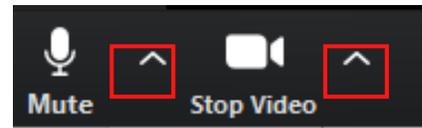


Then, select the screen or window you wish to share and click "Share."



Troubleshooting Tips

If you can't see or hear yourself, select the carat up symbols next to the microphone and video symbols. These will allow you to choose the correct microphone, speakers, and webcam.



Additionally, the caret next to the microphone has an option called "Test Speaker & Microphone" which is also helpful.

Keep in mind that Zoom advertises itself as having "end-to-end encryption" but this claim appears to be false. True end-to-end encryption means that communications are not able to be decrypted by the service provider (in this case Zoom). Zoom appears to only provide normal transport encryption (TLS) for its video meetings which could allow Zoom to potentially see your video content.

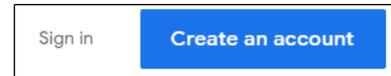


If you still cannot use your microphone, speakers, or webcam, see the troubleshooting guides at the end of this newsletter to investigate potential operating system issues.

Google Hangouts Guide

Sign Up Process

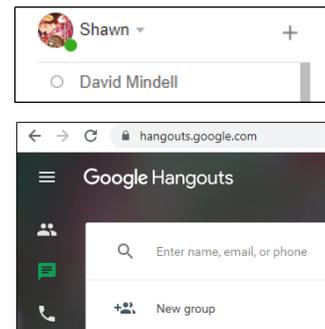
Google Hangouts is free to use with a Google account. Go to <https://gmail.com> and then either select "Sign in" or "Create an account" if you do not have an existing account.



Accessing Hangouts

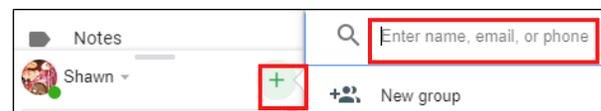
You can access Hangouts from either:

1. The bottom left of Gmail.
2. By visiting <https://hangouts.google.com>.

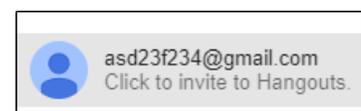


Invite Process

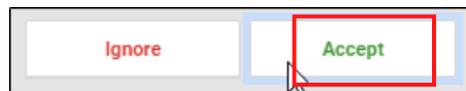
Click the "+" next to your name near the bottom left of Gmail, and type the email address of the person you would like to meet with and click their name. (The other person will need a Google account as well.)



Select "Invite" or "Click to invite to Hangouts"



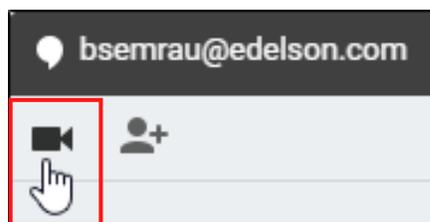
The recipient will need to accept your chat request by selecting "Accept."



Starting a Video Chat

The bottom left of Gmail will show all of the people you have previously invited to chat. (A green circle indicates the person is active and online.)

Select the person you would like to chat with which will open a chat window for sending messages back and forth. To start a video chat, select the camera button.



When you are finished with a chat, hover over the call and press the red hangup button.

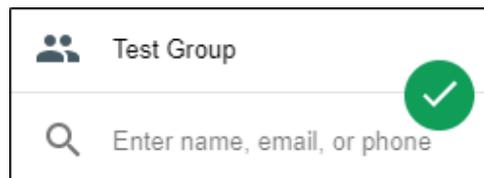


Starting a Group Video Chat

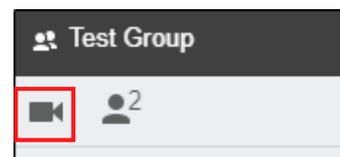
Select the + next to your name again and then select "New Group."



Now, provide a group name, enter the emails of the group members, and click the green arrow.

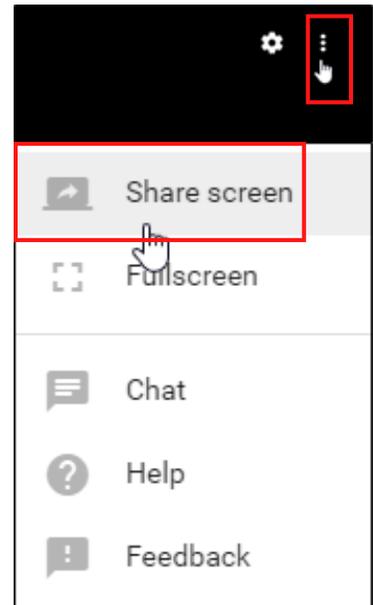


To start a group video chat, select the camera button.

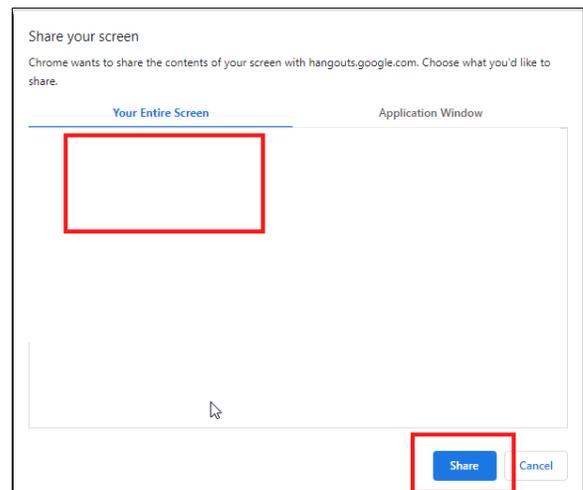


Sharing Your Screen

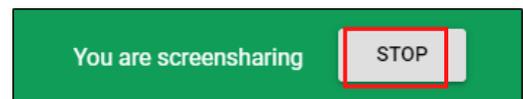
Once in the video chat, click the three vertical dots followed by "Share screen."



Select the screen you would like to share and select "Share."



Select "Stop" at the top of the call window when you are done sharing your screen.

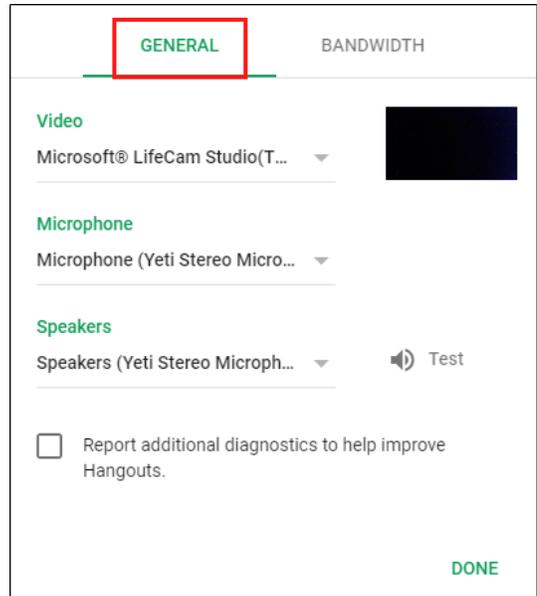


Troubleshooting Tips

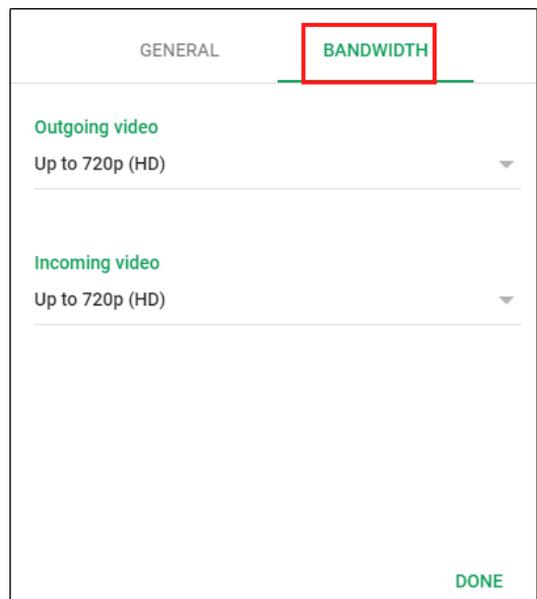
If you cannot see or hear yourself, select the gear icon within the meeting.



Next, under "General," select the correct webcam, microphone, and speakers.



Under "Bandwidth," you can turn the quality of outgoing or incoming video streams down to 360p if you are noticing laggy video when using the 720p HD setting.



IF you still can't use your webcam or microphone, you may have previously blocked access to them in the Chrome browser. Click on the lock icon for either Gmail or hangouts.google.com and then select "Site Settings."



For "Camera," "Microphone," and "Sound," make sure to select either "Ask" or "Allow."



"Ask" will ask you the next time Google Hangouts attempts to use your camera, microphone, or speakers. However, if at any time you click "Deny," you will need to repeat these instructions again.

"Allow" will automatically allow Google Hangouts to use your camera, microphone, and speakers in the future.

If you still cannot use your microphone, speakers, or webcam, see the troubleshooting guides at the end of this newsletter to investigate operating system issues.

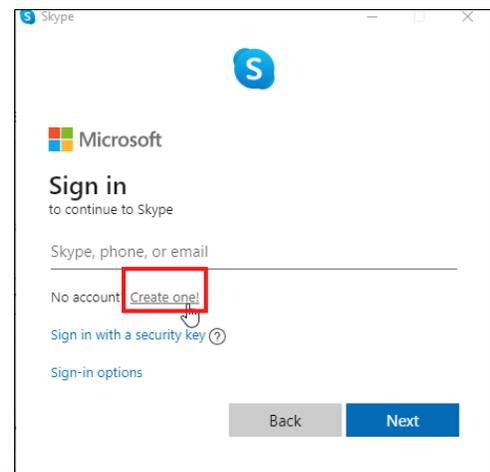
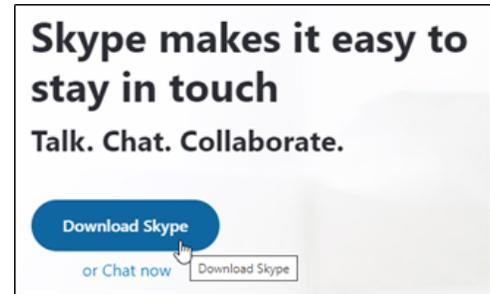
Skype Guide

Sign Up Process

Skype is free to use with a Microsoft account. Go to <https://skype.com> and select "Download Skype" and choose the installer for your platform (Windows, Mac, Linux).

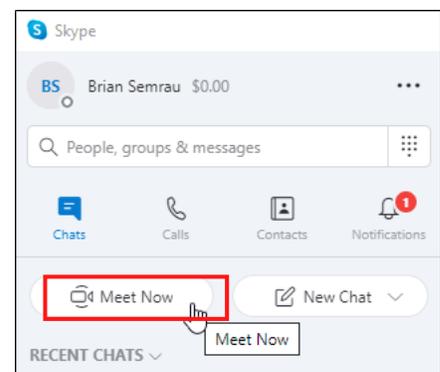
Once Skype has finished installing, search for "Skype" and launch the app.

Sign in with your existing Microsoft account, or select "Create One!" to register for a new account.

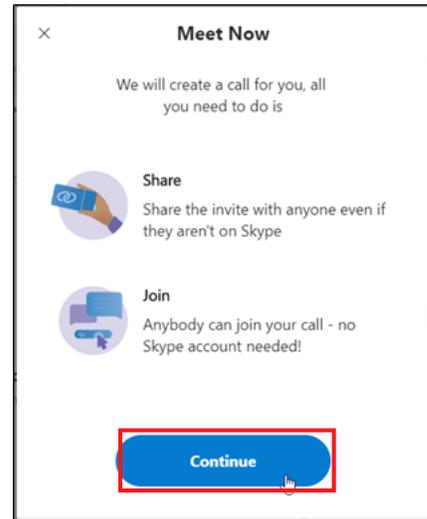


Starting a Video Chat

Once you have signed in, select "Meet Now."

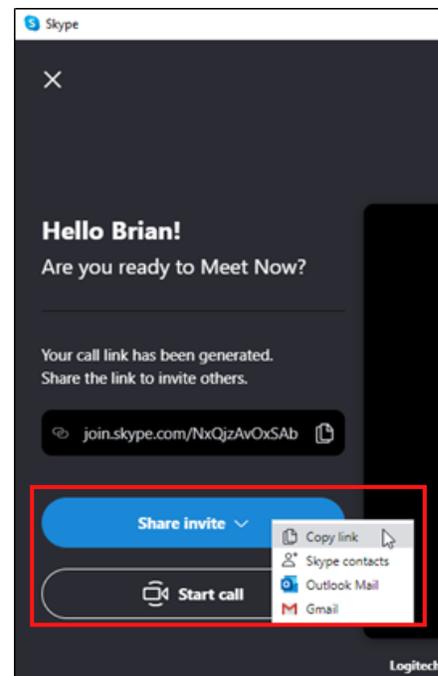


Next, select "Continue."



Select "Share invite" and choose how you would like to share the invitation.

Once you have shared the invite, select "Start call."

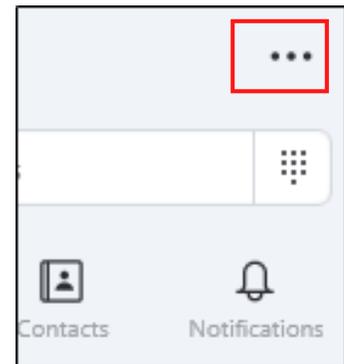


Once you are finished with the call, select the red "End call" button on your screen.



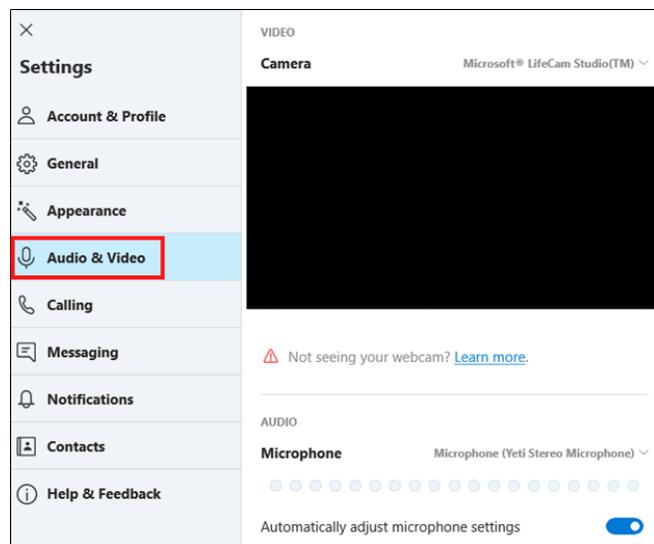
Troubleshooting Tips

If you cannot see or hear yourself, select the three horizontal dots prior to the meeting.



Then, select "Settings" and "Audio & Video."

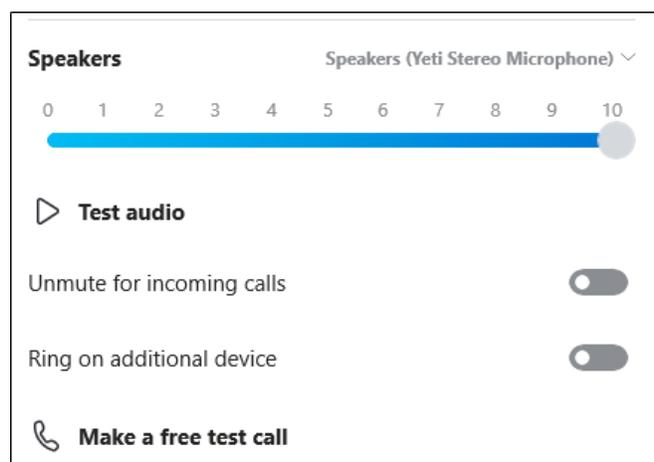
Now, use the dropdowns for "Camera" and "Microphone" to choose your correct device.



Scroll down further to see the settings to select your correct speakers.

You can also use the "Make a free test call" as well to confirm everything is working properly.

If you still cannot use your microphone, speakers, or webcam, see the troubleshooting guides at the end of this newsletter to investigate potential operating system issues.



WebEx Guide

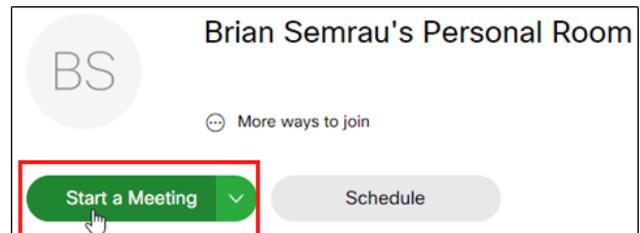
Sign Up Process

WebEx is currently offering free services via <https://www.webex.com/go-covid19.html>.

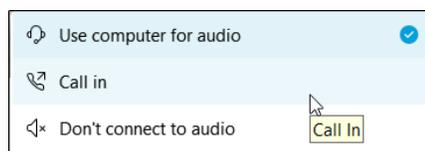
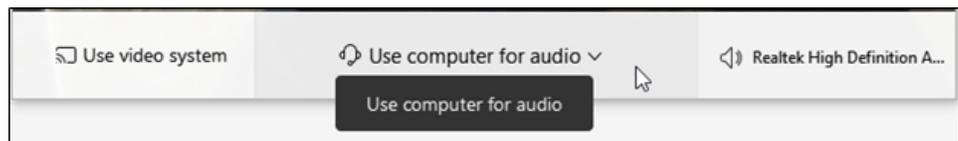
(Note: Due to high sign-up volume, there may a delay of a day or more in getting your free account set up.)

Starting a Video Chat

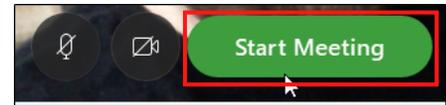
Once your account is set up, logon at <http://signin.webex.com> and select "Start a Meeting."



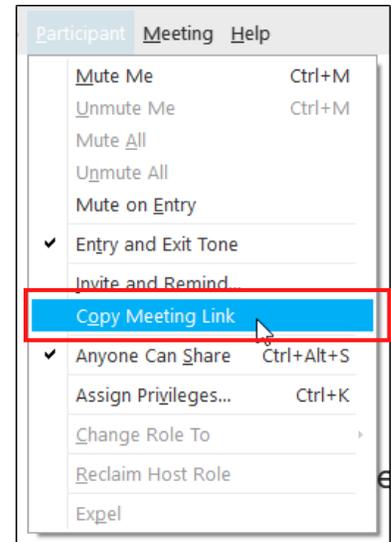
Verify that your correct webcam is selected. If you have headphones and a microphone, you can leave "Use computer for audio" selected. Otherwise, call in using a telephone by selecting the drop down and selecting "Call In."



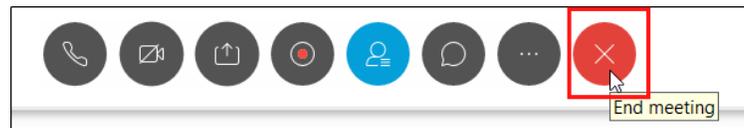
Now, select "Start Meeting."



After the meeting has started, select "Participant" followed by "Copy Meeting Link" which can be pasted into an email or chat message and be send to anyone you would like to invite.

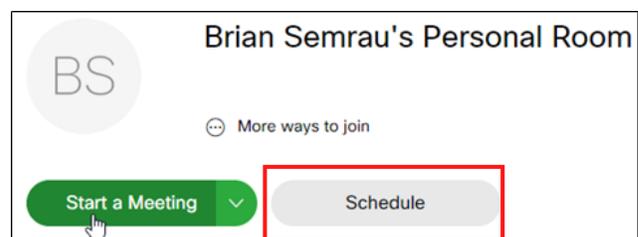


Once you are done with the meeting, hover over the meeting area and select the red "X."



Scheduling a Meeting

Once your account is set up, logon at <http://signin.webex.com> and select "Schedule."



Privacy Tips

There are several settings when scheduling a meeting that are useful.

A meeting password is selected by default, but you also have the option to only allow attendees that have registered accounts with WebEx for added security.

You can also select "Exclude password from email invitation" if you would like to provide the password via a different method such as verbally (since most email is not encrypted in transit).

Require account ⓘ	<input type="checkbox"/>	Require attendees to have an account on this site in order to join this meeting
Exclude password	<input type="checkbox"/>	Exclude password from email invitation

Under "Attendee privileges" you can enable or disable various privileges for attendees. You may want to disable the ability for attendees to be able to control your desktop remotely or allow private chat between participants.

Attendee privileges ✕

Select privileges that you want attendees to have when meeting begins:

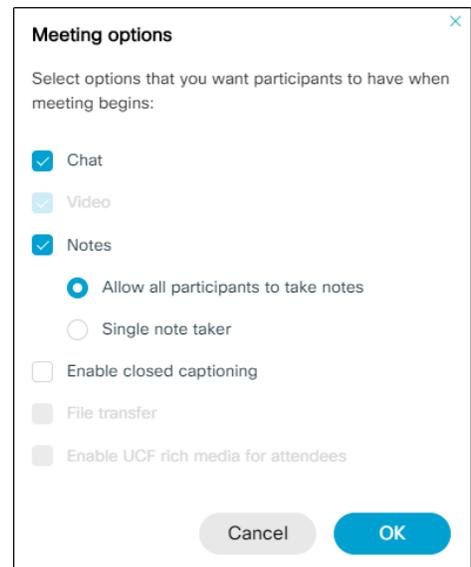
- Save
- Print
- Annotate
- View participant list
- View thumbnails
- Control desktop remotely
- View any document
- View any page
- Contact operator privately

Participate in private chat with:

- Host
- Presenter
- Other participants

Cancel OK

Under "Meeting options" you can disable "File transfer" if you would like to prevent the potential sharing of malicious files.

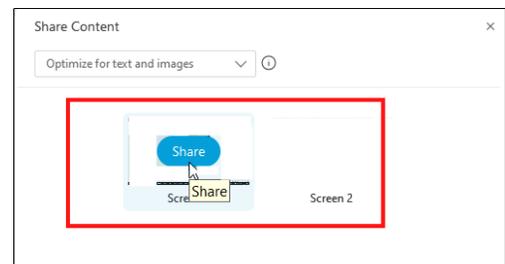


Sharing Your Screen

To share your screen, hover over the meeting area and select the "Share" button.

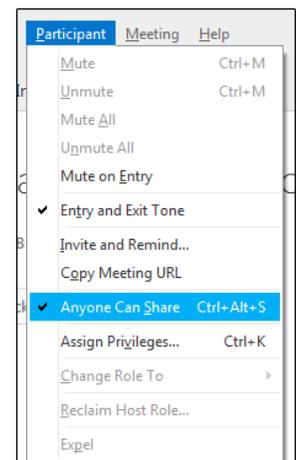


Select the screen you wish to share.



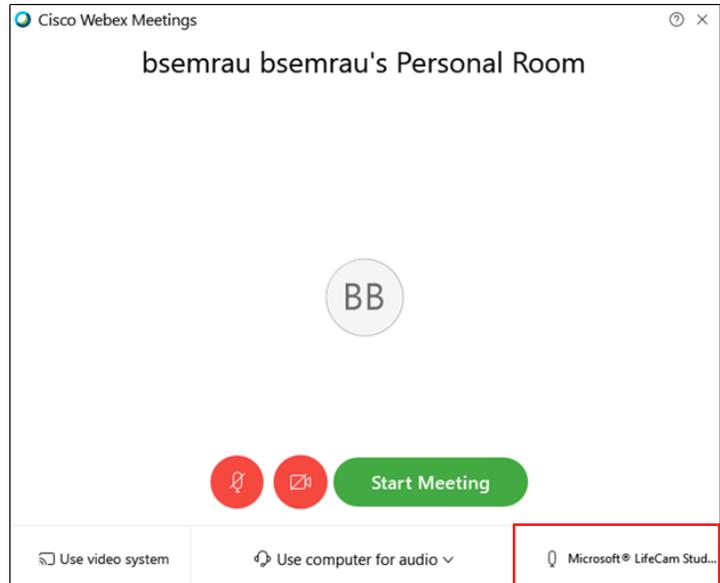
To prevent others from sharing, during the meeting select "Participant" at the top of the meeting windows and uncheck "Anyone can share."

Unintended participants can also be removed from the meeting by selecting "Expel."

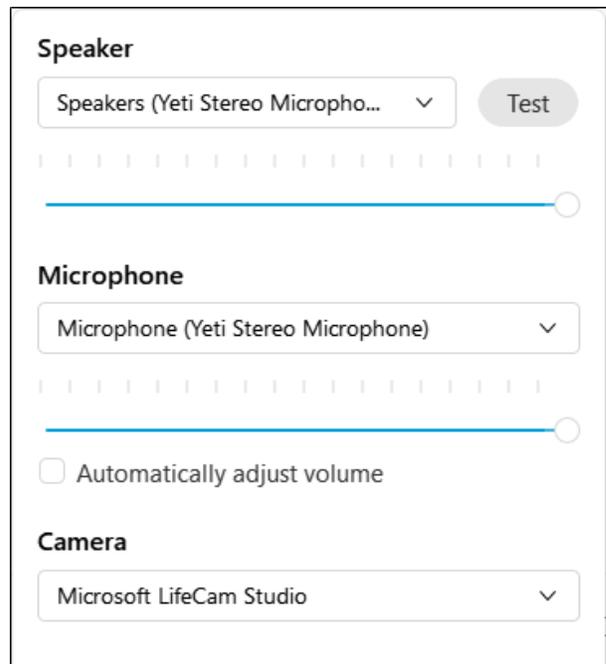


Troubleshooting

To ensure your camera, microphone, and speakers work, select the far right option prior to starting the meeting.



Now, you can test your speakers, microphone, and camera.

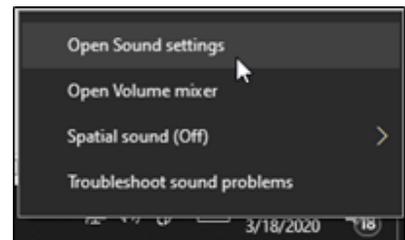


Windows Troubleshooting Guide

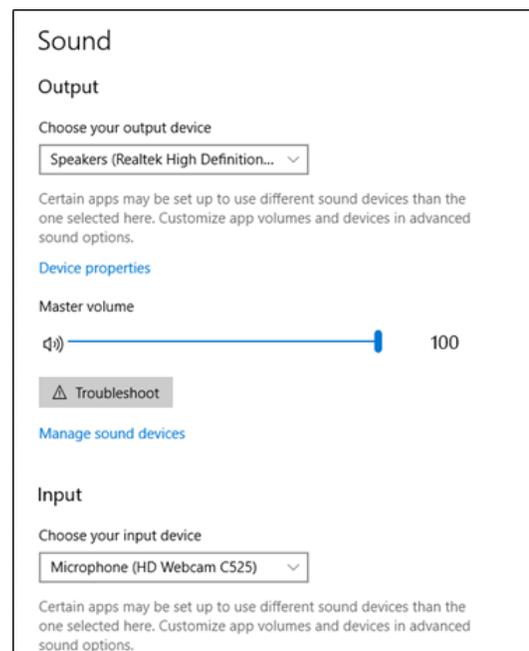
Please first view the troubleshooting section for the video conferencing guide of the software that you are using. If you are still having issues, this troubleshooting guide may be of help.

Audio Issues

If you can't hear any audio or other people can't hear you, right click the volume icon in your system tray, and select "Open Sound Settings."



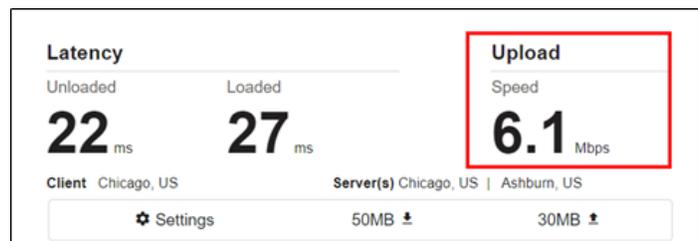
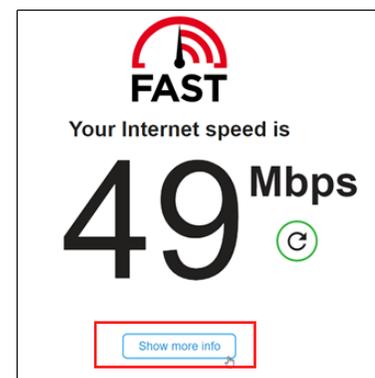
Make sure that your output device is set to your speakers or headphones, and that your input device is set to your microphone.



Quality Issues

If possible, make sure to use an ethernet cable versus trying to meet over WiFi. Even if WiFi has worked in the past, in areas with wireless congestion, increased usage of WiFi can result in even greater congestion in a limited frequency range. If using an ethernet cable isn't an option, ensure you are using 5GHz wireless and not 2.4GHz.

You should have a bare minimum of 8Mbps download and 5Mbps upload on your internet connection to ensure a good quality stream. To test your speed, visit <https://fast.com>. The download speed test will start right away, and once it completes it will show you your download speed. To find your upload speed, click "Show more info", and check the "Upload" speed.



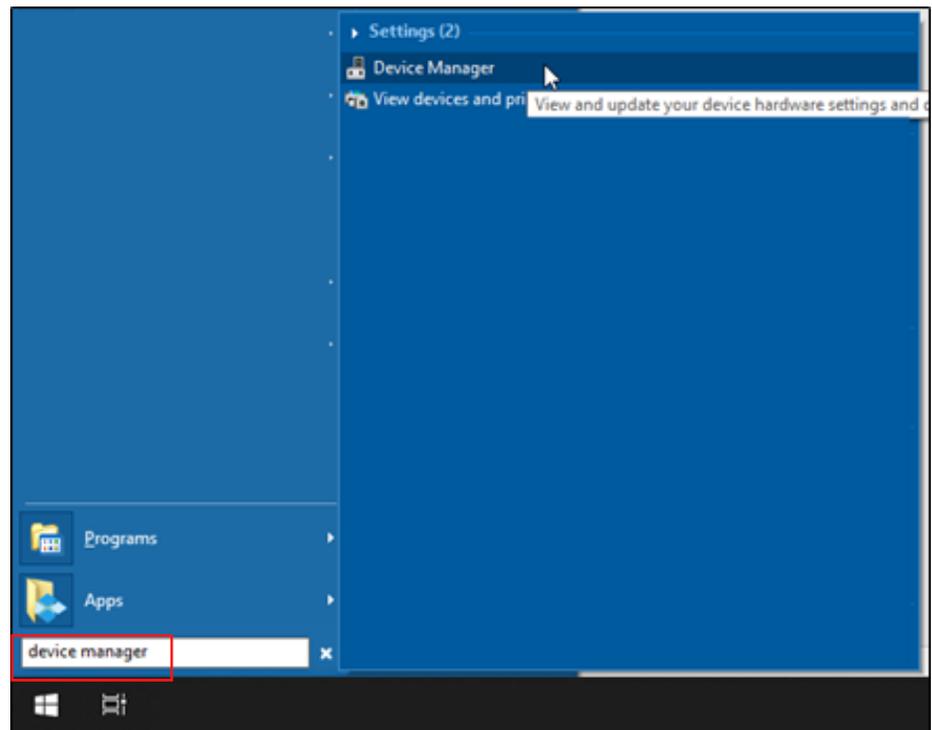
Additionally, the "Loaded" latency reading should be under 50ms to ensure that delays are not noticeable. Any users in rural areas using a satellite or wireless ISP connection may not be able to do anything to resolve latency issues. However, anything under 500ms should still be usable (although not ideal).

If you are seeing speeds less than 8Mbps download and 5Mbps upload, contact your internet service provider to see what service you are paying for. If you are paying for at least double the service you are getting, then there may be a problem that they need to address. Otherwise, you may need to look into upgrading your internet service to support high quality meetings. You may still be able to meet with less bandwidth, but the quality will not be as good and at times you may have issues with buffering.

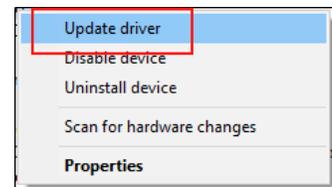
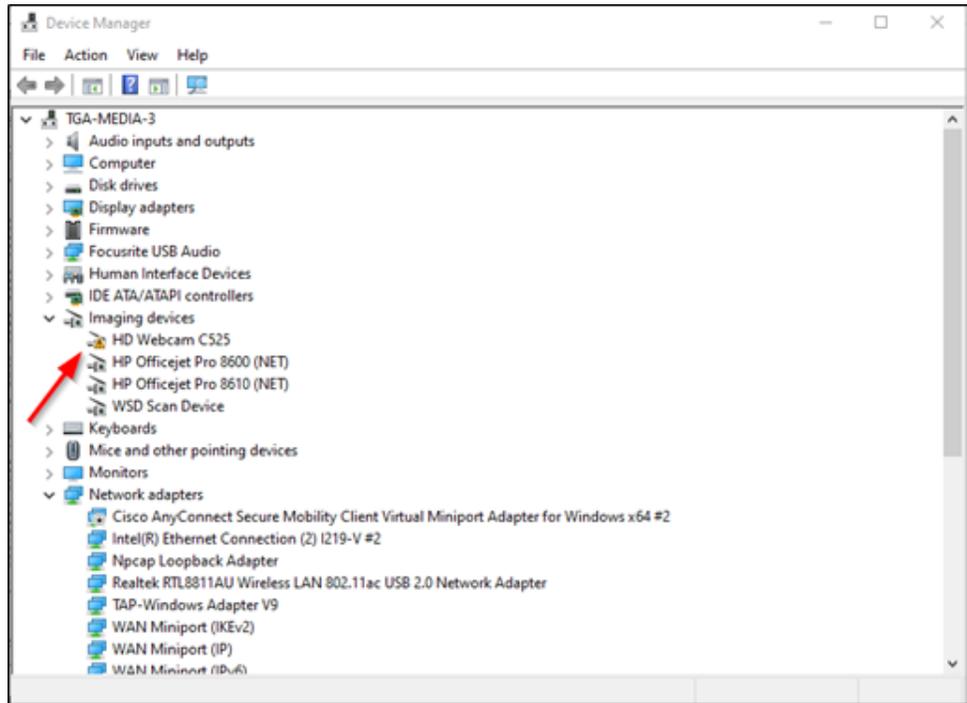
Webcam or Microphone Detection Issues

Start by unplugging and plugging your device back in. (Note, if you just plugged it in for the first time a few minutes ago, let it sit for a good 5 minutes to let it attempt to automatically install the driver.) This serves to ensure that the connector is seated properly (even if it looks right, it might not always be plugged in all the way), and should also prompt Windows to search for a driver again.

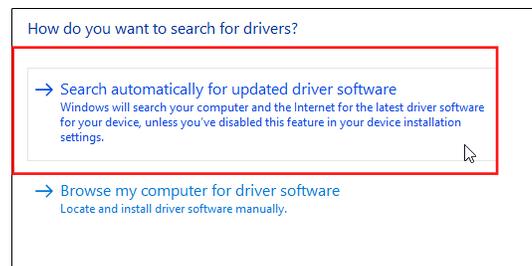
If your webcam or microphone still is not detected, click “Start,” search for “Device Manager,” and select the “Device Manager” application.



If you notice any devices related to your webcam or microphone with a yellow triangle over them, right click that device and click “Update Driver.”



Select “Search automatically for updated driver software.”



If you get a message that the best drivers for your device are already installed, or that Windows could not find drivers for your device, you may need to reach out the device manufacturer to obtain the latest drivers.

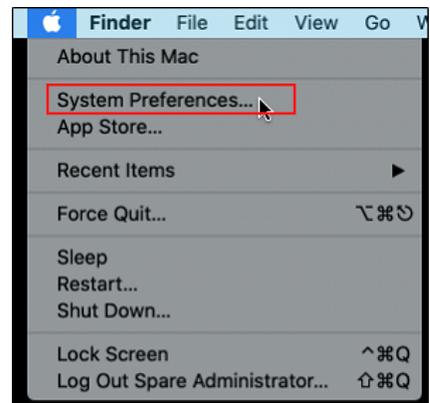
Be careful to make sure that you are reaching out to the real manufacturer website. Many scammers like take advantage of Google searches to post fake driver update utilities or run ads offering “support” for various manufacturers. Instead, it is recommended to go directly to the manufacturer’s website and search for the drivers from there or to call the customer support number listed on the manufacturer's website.

Mac Troubleshooting Guide

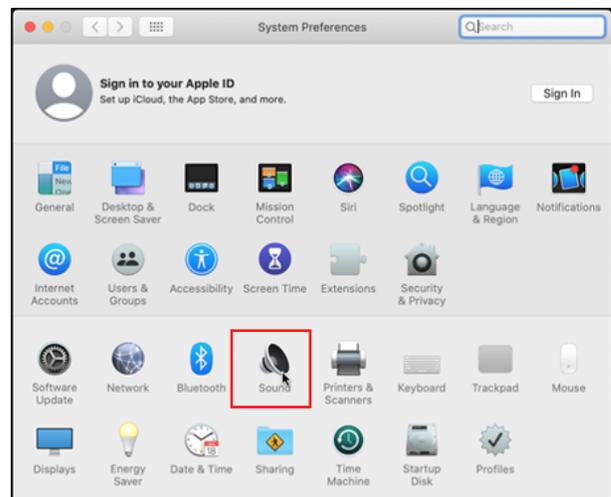
Please first view the troubleshooting section for the video conferencing guide of the software that you are using. If you are still having issues, this troubleshooting guide may be of help.

Audio Issues

If you can't hear any audio or other people can't hear you, click the "Apple" icon on the top left. Then, select "System Preferences."

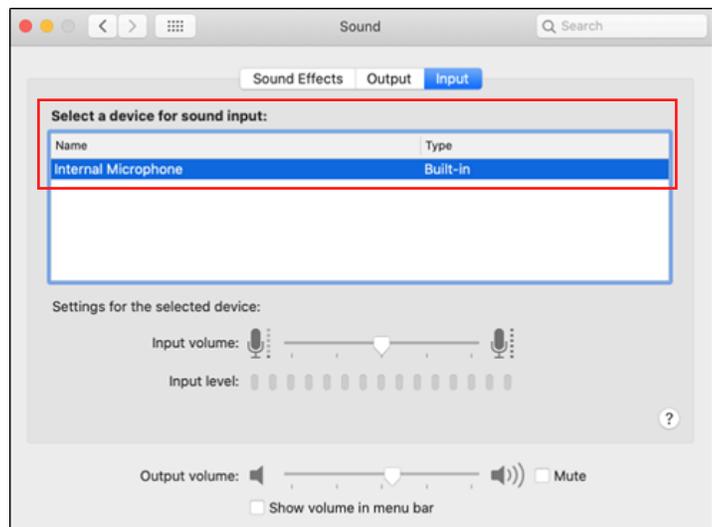
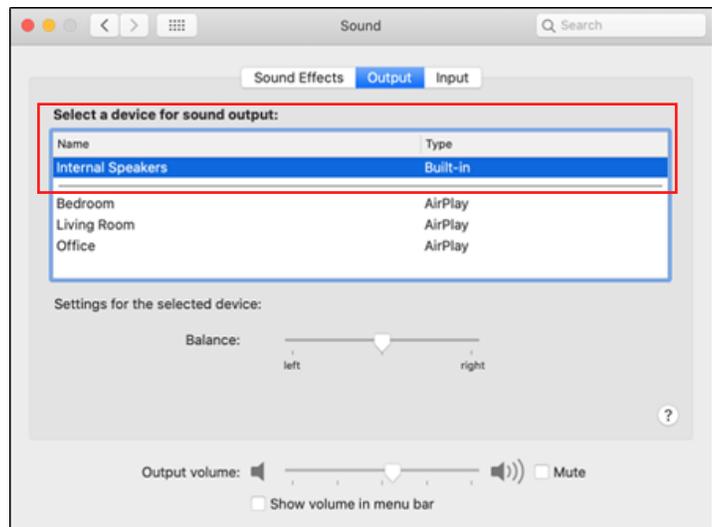
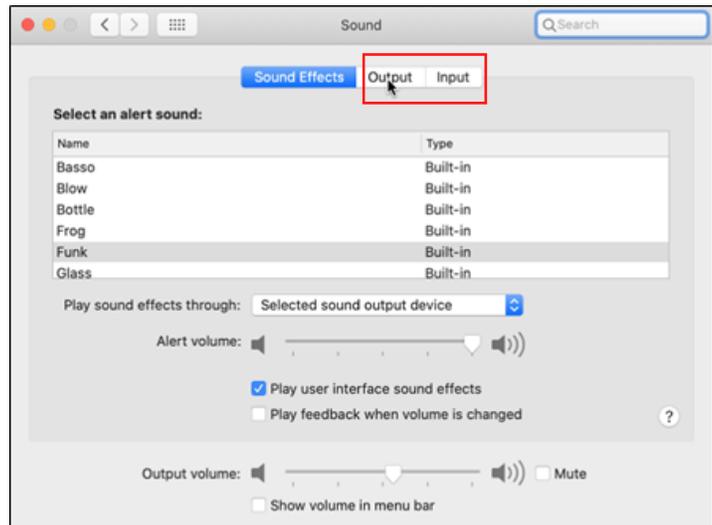


Click "Sound."



Click the "Output" tab and make sure the appropriate speakers/headphones are selected.

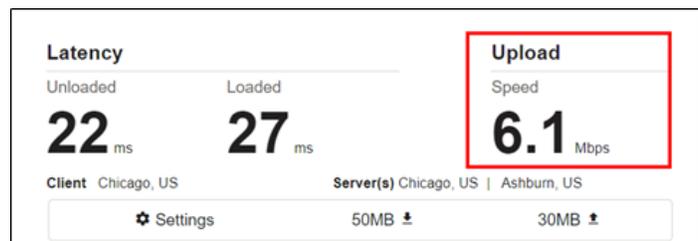
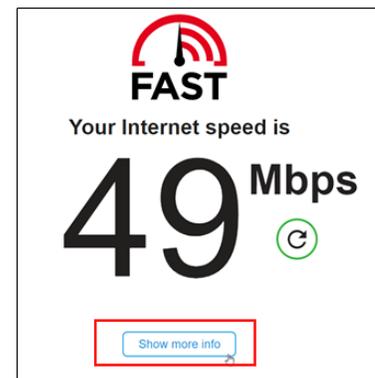
Select the "Input" tab to ensure the correct microphone is selected.



Quality Issues

If possible, make sure to use an ethernet cable versus trying to meet over WiFi. Even if WiFi has worked in the past, in areas with wireless congestion, increased usage of WiFi can result in even greater congestion in a limited frequency range. If using an ethernet cable isn't an option, ensure you are using 5GHz wireless and not 2.4GHz.

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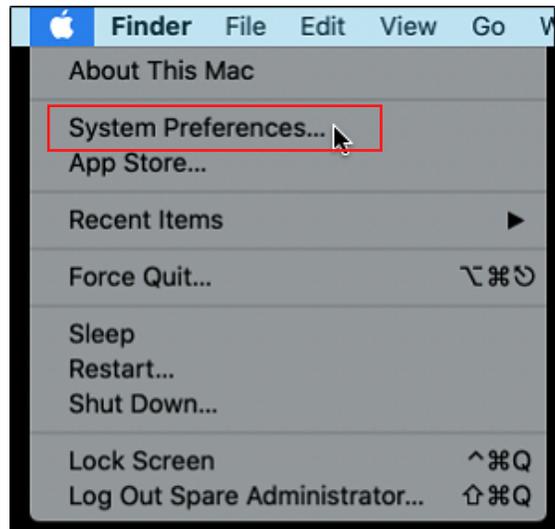


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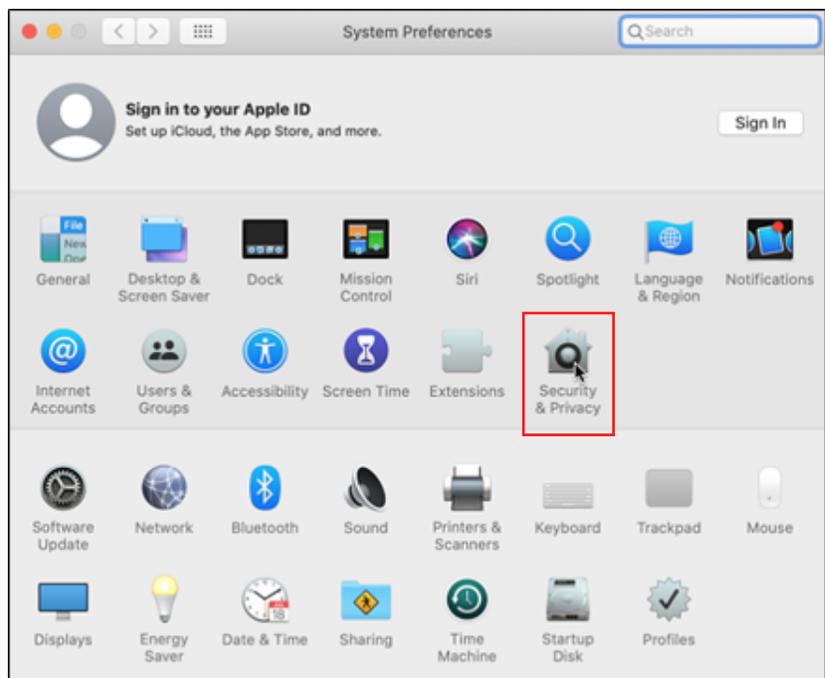
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Mac Privacy Permissions Issues

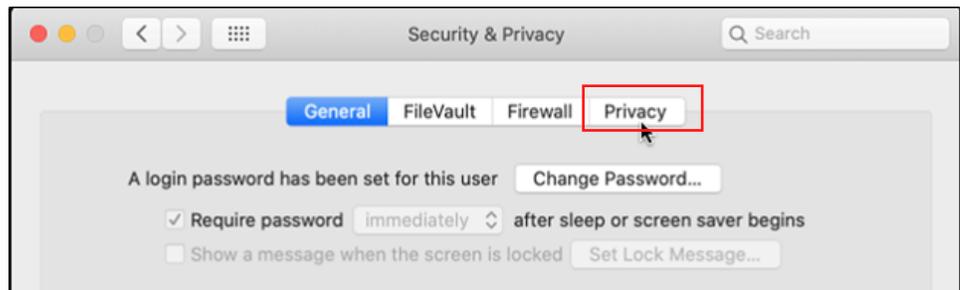
Mac's operating system adds additional permission requirements to areas of the computer such as the webcam and the microphone. While most programs will prompt you to authorize those permissions when required, if that step was missed they may need to be manually authorized. To manually authorize, click the "Apple" icon on the top left, then click "System Preferences."



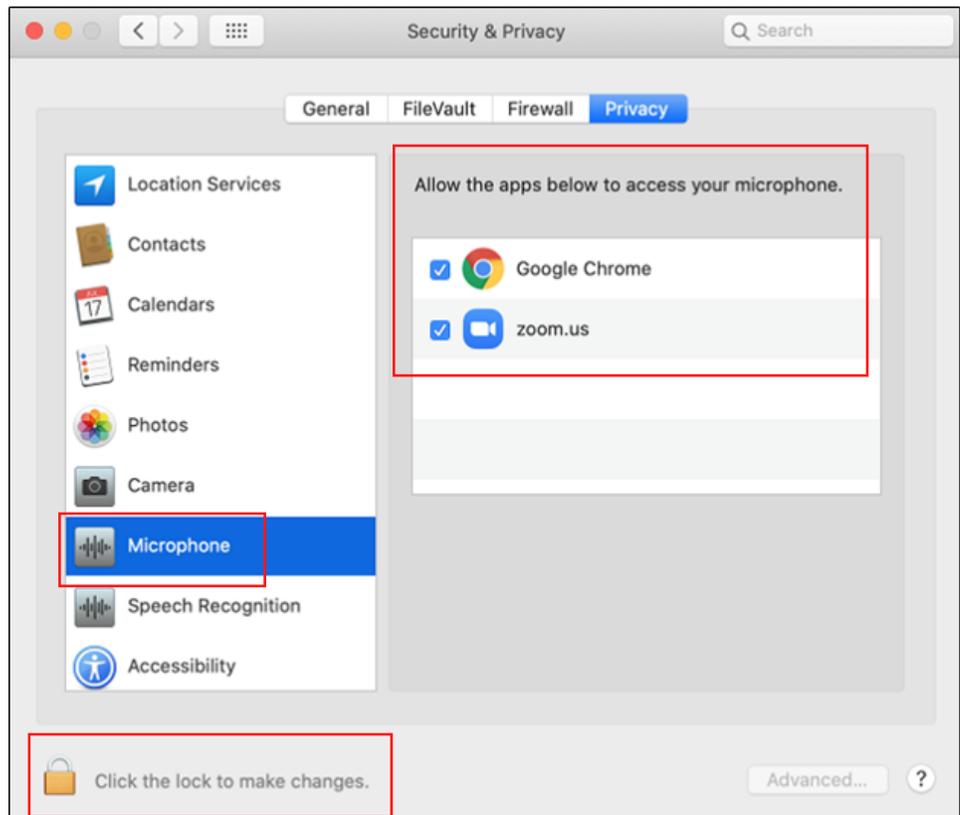
Select "Security & Privacy."



Select the "Privacy" tab.



Scroll to the "Camera" and "Microphone" sections and verify that your meeting platform is checked. (Note, if you are using Google Hangouts, you will also need to authorize your browser.)



If your meeting platform is not checked, click the lock button on the bottom right, enter your password, and now you should be able to check the box for your meeting platform. If you don't see your meeting platform listed, re-launch your meeting and make sure video and audio is enabled. Once the video conferencing program attempts to access your video or audio, it should show up in the privacy list above.