# **Zoom Meeting Security**

Last Modified on 11/09/2023 9:58 am EST

The best way to deal with disruptive behavior in a Zoom meeting is to prevent it from happening in the first place. This article details several ways to secure your Zoom meetings and how you can quickly deal with disruptions in an active Zoom meeting.

Before You Start

You will need:

- An activated Penn Zoom Account before completing any of the tasks in this article.
- Have the host or co-host role in the Zoom meeting.

## **Best Practices**

Zoombombing, wherein participants join Zoom meetings to cause a disruption, can derail any meeting. There are some things that you can do to thwart potential Zoombombers before they even have the chance to enter your meeting.

## Don't post meeting information publicly

Only share the Zoom meeting details with attendees. Avoid posting them on a publically accessible website (Canvas sites are only accessible to those people explicitly granted access).

You should also consider not using your Personal Meeting ID. This is a permanent meeting that has set login information. While your PMI is great for sharing with students and co-workers because the login information remains the same, it is less secure since that login information could be shared with others without your knowledge. We recommend setting up individual Zoom meetings for regular work/classes.

## **Enable Waiting Room**

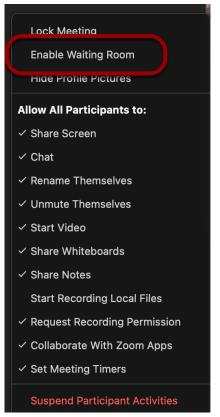
In a Zoom meeting with Waiting Room enabled, the meeting host/co-host has to admit people into the meeting. This allows you to control exactly who can join your meeting.

To enable the Waiting Room for a Zoom meeting as it is taking place (and the host/co-host of):

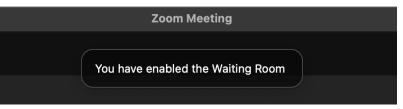
1. Click the Security icon at the bottom of your Zoom meeting window.



2. Click Enable Waiting Room on the Security menu.



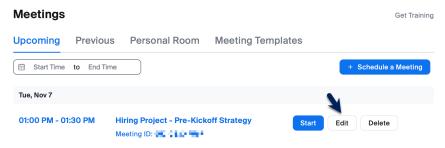
3. You'll see an alert that lets you know the waiting room has been enabled for the meeting.



You'll get an alert whenever someone enters the Waiting Room. You can read more about Waiting Rooms in Zoom's documentation.

To enable the Waiting Room for a meeting scheduled in the future:

- 1. Log into .us with your PennKey username and password.
- 2. Click on Meetings in the left sidebar.
- 3. You will see a list of your upcoming meetings. Hover over the meeting you want to change and click the blue **Edit** button.



4. Scroll down to the Security section and check the box next to Waiting Room.

Security	✓ Passcode 2086424
	Only users who have the invite link or passcode can join the meeting
	Waiting Room
	Only users admitted by the host can join the meeting
	Require authentication to join

5. Click **Save**, and your meeting is updated.

To have all of your new Zoom meetings have Waiting Room enabled by default:

- 1. Log into .us with your PennKey username and password.
- 2. Click on Settings on the left sidebar.
- 3. This should open the Meeting settings, with Waiting Room near the top.

PERSONAL	Q Search Settings		
Profile			
Meetings	General Meeting Al Companion Recording Calendar		
Webinars			
Personal Contacts	Security		
Personal Devices	Require that all meetings are secured with one security option		
Whiteboards	Require that all meetings are secured with one of the following security options: a passcode, Waiting Room, or "Only authenticated users can join meetings". If no security option is enabled, Zoom will secure all meetings with Waiting Room. Learn more		
Notes (NEW)			
Recordings			
Settings	Waiting Room		
Reports	When participants join a meeting, place them in a waiting room and require the host to admit them individually. Enabling the waiting room automatically disables the setting for allowing participants to join before host.		
Toggle Waiting Room on.			
Waiting Room			
	ace them in a waiting room and require nabling the waiting room automatically icipants to join before host.		
Waiting Room Options			
The second secon	and the second		

The options you select here apply to meetings hosted by users who turned 'Waiting Room' on

 $\checkmark~$  Everyone will go in the waiting room

4.

 $\checkmark\,$  People in the waiting room are sorted by join order

Edit Options Customize Waiting Room

- 5. Click **Edit Options** if you'd like to change who should go into the waiting room ("users not in your account" means non-Penn users), among other things.
- 6. Changes are saved automatically, so any meetings you create going forward will have a Waiting Room.

If you enable "Allow Authenticated Users Only" (see the next section for more information on this setting), you can allow authenticated users to skip the Waiting Room and be automatically allowed into the meeting by following these directions after logging into .us with your PennKey username and password:

**Note**: This is a global setting for your account, which will impact all of your Zoom meetings with both Waiting Room and Authenticated Users enabled.

- 1. Click Settings.
- 2. Click Security.

ľ

- 3. Under the Waiting Room section, click **Edit Options**.
- 4. Change "Who should go into the waiting room" to "Users not in your account." This will allow Penn users to skip the Waiting Room whilst, non-Penn users, or unauthenticated Penn users, will need to be allowed into the meeting from the Waiting Room.

Who should	go in the waiting room?
O Everyor	e
⊖ Users n	ot in your account
O Users w	ho are not in your account and not part of your whitelisted domains
Cast and an	of people in the waiting room in the participants panel: 😢 🔃 🛛 🕬
O Join ord	
Alphabe	atical
Customize	Waiting Room Options:
	allow the host to add a custom logo
More Optic	ins
Users in room	nvited during the meeting by the host or co-hosts will bypass the waiting
Allow pa	articipants in the waiting room to reply to host and co-hosts
If the host meeting:	and co-hosts are not present or if they lose connection during a
Move p	articipants to the waiting room if the host dropped unexpectedly

5. Click Continue.

## Authenticated users only

You can require that all attendees be logged in with their Penn accounts or a Zoom account before they can join your meeting. You can limit it to (the following list goes from least to most inclusive and is additive):

- Penn users only
- Anyone with a Zoom account
- Specific exceptions can be added per meeting (i.e., santa@northpole.com can join without having to authenticate, but everyone else has to since they might be naughty).

You can require authentication on a per-meeting basis or by default for all meetings:

#### On an individual meeting

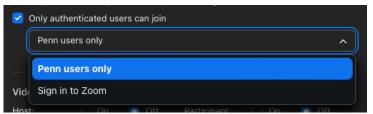
#### New Meeting

1. Launch Zoom.

- 2. Schedule a new meeting.
- 3. Scroll through the Schedule Meeting window and check the box next to "Only authenticated users can join."

Торіс	
Scott McN	lulty's Zoom Meeting
Date & Tim	e
11/06/202	3 × 9:30 AM × to 10:00 AM × 11/06/2023 ×
Time Zone:	Eastern Time (US and Canada) 🗸 🗸
Recurrin	ig meeting
Attendees Email or r	
Meeting ID	
🗿 Generat	e Automatically OPersonal Meeting ID 278 053 0264
Security Passcod Only user	le 268729 ⑦ s who have the invite link or passcode can join the meeting
🕑 Waiting	Room
Only usor	henticated users can join
Only aut	
<ul> <li>Only aut</li> <li>Video</li> </ul>	

4. Select either Penn users only (the default) or Anyone with a Zoom account from the dropdown.



5. Continue scheduling your meeting as usual.

#### **Existing Meeting**

The best way to force authentication on an existing meeting is to edit the settings via.us:

- 1. Log into **.us** with your PennKey username and password.
- 2. Hover over the meeting you'd like to edit from your Upcoming Meetings.
- 3. Click the Edit button that appears as you're hovering over the meeting.

#### Meetings

Get Training

	Upcoming	Previous	Personal F	Room Meet	ng Templates	
	Start Time	to End Time				+ Schedule a Meeting
	Tue, Nov 7					<b>N</b>
	01:00 PM - 01:3		ing Project - I eting ID: 💶 🕻	Pre-Kickoff Strate	egy Start	Edit Delete
	<b>Check</b> "Require at Select either <b>Penr</b>		-		n. <b>Zoom account</b> from tl	ne dropdown.
Security       Passcode       208642         Only users who have the invite link or passcode can join the meeting         Waiting Room         Only users admitted by the host can join the meeting						
		Require a	uthentication to	) join		
	Video	Host	$\bigcirc$ on	O off		
		Participant	$\bigcirc$ on	🔾 off		

6. Click Save.

#### **Allowing Exceptions**

Authentication Exceptions allow you to list people who don't have to authenticate to enter a meeting that requires it. This allows you to limit your attendees to Penn folks (or people with a Zoom account) but include non-Penn guest speakers. Here's how:

- 1. Log into .us with your PennKey username and password.
- 2. Hover over the meeting you'd like to edit from your Upcoming Meetings.
- 3. Click the Edit button that appears as you're hovering over the meeting.
- 4. Click Add next to "Authentication Exception" under "Require authentication to join" in the Security section.

~	Require authentication to join		
	Penn users only		~
	*.upenn.edu Edit		
	Authentication Exception Add	1 Import from CSV	

5. Type the exception's full name and email address.

The participants added here will receive unique meeting invite links and bypass authentication.          Santa       santa@northpole.com       ×	Authentication Exception	
Santa Santa@northpole.com ×		s and bypass
	Santa Santa@northpole.com	×
+ Add Participant	+ Add Participant	
Save Cancel		Save Cancel

- 6. Click Add Participant to add more exceptions.
- 7. Click **Save** to save the exceptions.
- 8. Click **Save** to save the settings for the meeting.

#### Making this a Default Setting

You can require authentication for all your Zoom meetings going forward by logging into.us with your PennKey username and password and following these directions:

- 1. Click Settings.
- 2. Click Security.
- 3. Scroll down until you see "Only authenticated meeting participants and webinar attendees can join meetings and webinars."
- 4. Click the toggle next to that section to turn it on (the toggle displays blue when a feature is active).

Only authenticated meeting webinar attendees can join	<u> </u>		
Meeting participants and webinar attendees will need to authenticate prior to joining a session. Hosts can choose one of the options below when scheduling meetings or webinars.Learn more Meetings & Webinar Authentication Options:			
·			
Penn users only (Default)	Edit Hide in the Selection		
Sign in to Zoom	Edit Hide in the Selection		
Allow authentication exc	eption (?)		

5. Your settings are automatically saved, and now, each Zoom meeting you schedule will require attendees to authenticate.

Note: Penn users only is the default and recommended authentication setting. You can change this by clicking **Edit** next to "Sign in to Zoom" under "Meetings & Webinar Authentication Options" and checking the default box.

## **During Your Meeting**

Despite following all of our best practices, disruptions could occur in a Zoom meeting in which you're the host (or cohost). There are a few Zoom tools that make it easy to deal with a disruptive participant quickly:

- Remove Participant Disruptive participants are easy to remove once identified.
- Lock Meeting Locking your meeting stops any further participants from joining.
- Suspend All Participant Activities The most severe option of the bunch; this will stop all activity in the meeting so you can gather your thoughts and identify the disruptive participants who should be removed.

The following three sections detail each of these features in turn.

Remember - Keep your cool; all of these tools are only a few clicks away!

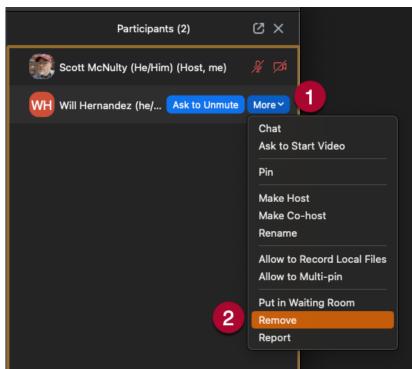
### **Remove Participant**

If you can identify the disruptive participants, you can remove them from your Zoom meeting:

1. Click on the **Participants** icon at the bottom of the Zoom window to show the Participants list if it isn't already showing.



- 2. Find the person you'd like to remove and hover over their name in the list.
- 3. Click on More to reveal a list of options.



4. Click on **Remove** to remove the selected participant.

5. A confirmation popup appears. We recommend unchecking "Report to Zoom."

Remove 'Will Hernandez'?				
Once removed, Will Hernandez will not be able to rejoin the meeting.				
🥑 Report to Zoom	Cancel	Remove		

6. Click **Remove**, and the participant is removed from your meeting and will not be able to rejoin.

7. Repeat for each participant you'd like to remove.

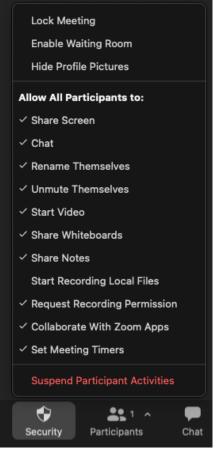
### Lock Meeting

You may want to stop additional people from joining your meeting for some reason. To do this, you need to "Lock" your meeting:

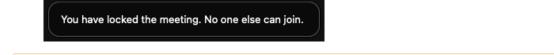
1. Click the Shield icon labeled **Security** at the bottom of your Zoom meeting window.



2. A list of all the in-meeting security controls available to you appears. Click Lock Meeting at the top of the list.



3. An alert appears, letting you know that no one else can join the meeting.



**Note**: To allow people to join, unlock the meeting by clicking the Security Icon and then clicking "Lock Meeting" again.

### **Suspend All Activities**

If there is a significant disruption in your meeting, you can suspend all participant activities with a few clicks. Be warned that this turns off most of the functionality of your Zoom meeting. Suspending all participant activities does all of the following:

- Mutes all video and audio.
- Hides all profile pictures
- Stops all active screenshares and turns off screensharing.
- Closes all breakout rooms.
- Stops the meeting recording if the meeting is being recorded.
- Turns off any Zoom apps active in the meeting.
- Locks the meeting, preventing anyone else from joining.

Once all activity has been suspended, you can use the "Remove Participant" directions above to remove the disruptive participant(s).

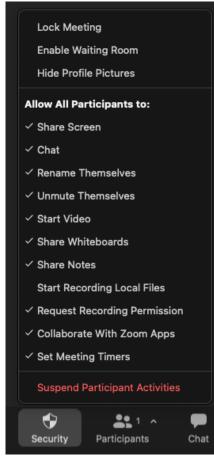
Warning: If you suspend all activity, you'll need to restart your Zoom recording.

To Suspend All Participant Activity in a meeting:

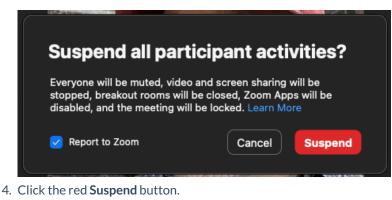
1. Click the Shield icon labeled **Security** at the bottom of your Zoom meeting window.



2. Click Suspend Participant Activity at the bottom of the list in red.



3. **Uncheck** "Report to Zoom" in the notification, which also reminds you that you're about to turn off all the functions in your Zoom meeting.



5. You'll get a confirmation message that all activity has been suspended in the meeting.

Participant activities have been suspended  $\,$  imes

Once you've dealt with the disruption, you can turn on individual features by clicking the Security icon and enabling each feature individually.

## After Your Meeting

If any of your Zoom meetings are disrupted besides using the features above, report the incident to the Wharton Information Security Office (security@wharton.upenn.edu). They can engage additional resources, if needed, and offer any help you may require.

## Questions?

Contact your Wharton Computing Representative or the Wharton Information Security Office for more information.