

Zoom with NVDA

Joining and Participating in a Meeting



This tutorial has been designed to introduce you to joining and then participating in a Zoom meeting on a Windows 10 computer, in conjunction with NVDA. It also covers all of the available controls in a Zoom meeting and what they are used for!

By the end of this tutorial, you'll know how to:

- Join a Zoom meeting from an email invitation link.
- Navigate the controls in the Zoom Meeting screen.
- Mute and unmute the microphone.
- Turn video on and off.
- Raise and lower your hand.
- Send and read Chat messages.
- Find out who is in the meeting.
- Exit a meeting.

Note 1: The version of NVDA used in the creation of this tutorial was 2020.4. The version of Zoom used was 5.6.1.

Assumptions Made in this Tutorial

Some assumptions have been made in the creation of this tutorial. They are as follows:

- You are using a Windows 10 desktop or laptop computer.
- You are using the latest version of Zoom Cloud Meetings. For reference, the latest version of Zoom is 5.7.5.
- You are using NVDA version 2020.4 or later.
- You are experienced in the use of email.

What is Zoom Cloud Meetings?

Zoom Cloud Meetings, known simply as 'Zoom', is a video conferencing platform that is often used to conduct meetings via the web. It works on Smartphones, Tablets, Desktop and Laptop computers. Zoom was originally used by businesses to conduct their meetings and conferences, however, more and more commonly, Zoom is used by individuals to stay in touch with family and friends! Best of all though, zoom is extremely easy to use!

Invitations to Join Zoom Meetings

Zoom meetings involve two types of user. A Host, who organises the meeting in Zoom, and Participants, who are invited to join the meeting. Invitations to join Zoom Meetings are sent via email. An invitation to a Zoom meeting may require registration in order to join it. If registration is required, the email will inform you that you need to 'Register in advance for this meeting' and a link will be provided to register. If registration is not required, the email will include the text "Join Zoom Meeting" and a link will be provided to join the meeting.

Joining a Zoom Meeting from an Email Invitation

When you are invited to join a Zoom meeting, the organiser includes the relevant meeting information in the email message. For example, the date and time of the meeting, a Meeting ID and Password. Also included in this message, will be a link which, when activated, starts the joining process by taking you to a web page on the Zoom web site.

To join a Zoom meeting from an email invitation, follow these suggested steps:

1. Start your email program.
2. Locate and open the email message which contains the Zoom meeting invitation.

3. Locate and activate the invitation link. For reference, this will start with "https://us". Upon doing this, you'll be taken to a web page on the Zoom web site. NVDA will say "Open Zoom meetings" or "Launch Zoom Meeting".
4. On the web page, focus should be on a button labelled "Cancel". To the left of this button, you'll find another button labelled "Open Zoom Meetings". Press TAB until this button is selected and then press ENTER. Upon doing this, depending on how the host has configured the meeting, you'll either join the meeting straightaway, or be re-directed to the virtual Waiting Room.

Note 2: If the Open Zoom Meetings button is not present, press TAB until the button labelled Launch Meeting is selected and then press ENTER. Upon doing this, the Open Zoom Meeting button will become available!

5. If you arrive at the virtual Waiting Room, NVDA will say "Please wait for the host to start this meeting. The Host will admit you to the meeting when they are ready to start". Hopefully, you shouldn't have to wait too long!

Note 3: Upon joining a meeting, a popup window may be displayed which contains a Zoom Meeting ID. If this is the case, you'll be prompted to choose an audio source for the meeting. There are a couple of options available, but the one you want is 'Join with Computer Audio'. Press TAB until this option is selected and then press ENTER. That's it, you've successfully joined the Zoom meeting!

Description of the Zoom Meeting Screen

The Zoom Meeting screen consists of a video area, which takes up the vast majority of the screen. Running along the bottom of the screen, you'll find a toolbar, on which are situated the most commonly used controls.

From left to right, the controls at the bottom of the screen are: Audio, Audio Settings, Video, Video Settings, Participants, More Options for Participants, Share, More, Leave and View. For your convenience, all of the controls are described below.

The Mute/Unmute Button

The Mute/Unmute button is used to control the status of the microphone. When the microphone is muted (turned off), the name of the button changes to become Unmute. When the microphone is Unmuted (turned on), the name of the button changes to become Mute.

The Audio Settings Button

To the right of the Audio button, you'll find the Audio Settings button. This button, when activated, displays a menu consisting of options for specifying a microphone to be used throughout the meeting. Also, there's an option for specifying which speakers to use. In this menu, you'll also find an option for testing your microphone and speakers as well as an option for leaving the audio. It's not usually necessary to access the options in this menu, so they'll not be discussed further in this tutorial.

The Video Button

The Video button is used to control the status of your camera. When the video is stopped, the name of the button changes to become Start my Video. When the video is started, the name of the button changes to become Stop my Video.

The Video Settings Button

To the right of the Video button, you'll find the Video Settings button. This button, when activated, displays a menu consisting of options for choosing a camera to be used throughout the meeting. Also, you'll find an option for specifying a virtual background, as well as an option for applying filters. It's not usually necessary to access the options in this menu, so they'll not be discussed further in this tutorial.

The Participants button

The Participants button is used to show or hide the Participants panel. When the Participants panel is shown, you can press `DOWN ARROW` to browse the list of participants. As you navigate the list, NVDA informs you whether or not the audio and video is on/off for the selected participant.

The More Options for Participants Button

To the right of the Participants button, you'll find the More Options for Participants button. This button, when activated, displays a menu consisting of just one option. This is the Invite button. This allows you to invite someone else to join the meeting. It's not usually necessary to invite someone else to a meeting, so this will not be discussed further in this tutorial.

The Share Button

The Share button is used to display options for sharing your computer's screen. By default, only the Host can share screens, therefore, this option will not be discussed further in this tutorial.

The More Button

The More button is used to display a list of additional controls. These are the Chat, Reactions and Record on this Computer buttons. These are described below:

The Chat Button

The Chat button, when activated, shows or hides the Chat panel. This includes an edit box, for typing a chat message. There's a list of participants from which you can choose who to send your message to. By default, any message you send goes to everyone in the meeting.

The Reactions Button

When the Reactions button is activated, a menu is displayed which contains the following options: clap, thumbs up, joy, open mouth, heart and tada. There's also an option for raising your hand. You can navigate the options in this menu using TAB. To activate an option, press ENTER. When you activate any of the options, sighted participants, along with the Host, will be able to see an icon associated with the reaction you activated, in your video stream.

The Record on this Computer Button

It's possible to record a Zoom meeting. However, this can only usually be done by the Host. Therefore, this button won't be discussed further in this tutorial.

The Leave Button

The Leave button is used to exit the meeting. When it's activated, a popup window is displayed which contains 2 buttons labelled "Leave Meeting" and "Cancel". You can press TAB to navigate between these buttons and ENTER to activate the selected button.

The View Button

When the View button is activated, a menu is displayed which contains the following options: Full Screen, Speaker View and Gallery View. Full screen fits the currently displayed video feed to the whole screen. Speaker View shows just the person who is currently talking. Gallery View displays all participants in a grid structure, up to 49 at a time.

Navigating the Controls in a Zoom Meeting

You can navigate forwards through the controls in a Zoom Meeting by pressing TAB. To activate a control, press ENTER or SPACEBAR. To navigate backwards through the controls, press SHIFT and TAB.

It's also possible to activate most of the controls on the toolbar using the following keyboard shortcuts:

ALT and A Mute or Unmute the Audio (microphone)

ALT and V Start or Stop the Video

ALT and U Show or Hide the Participants Panel

ALT and H..... Show or Hide the Chat Panel
ALT and Y Raise or Lower your Hand
ALT and F1 Switch to Gallery view
ALT and F2 Switch to Speaker view
ALT and F Switch to Full Screen view
ALT and Q..... Activate the Leave button

Asking a Question During a Zoom Meeting

If you wish to ask a question during a Zoom Meeting, press the keyboard shortcut ALT and Y. Upon doing this, all sighted participants, along with the host, will be able to see the Raise Hand icon, in your video stream. NVDA will not alert you to the fact that you've raised your hand. If you change your mind, press ALT and Y again. Upon doing this, the Raise Hand icon will be removed from your video stream and NVDA will say "Hand now lowered". This will inform the Host that you no longer wish to ask a question.

Sending and Reading Chat Messages

It's possible to send short chat messages to other participants in a Zoom meeting. Some of the reasons for sending chat messages are to ask a question and to share contact details with other participants. By default, when you send a message, it's sent to everyone. However, it's also possible to send a message to a specific participant!

Sending a Message to Everyone

To send a chat message to everyone in a meeting, follow these suggested steps:

1. Press the keyboard shortcut ALT and H. Upon doing this, the Chat panel will be displayed.

2. In the Chat panel, focus will be in the Input Chat edit box. Type your message and press ENTER when done. Upon doing this, the message will be sent to everyone and NVDA will read the message!

Sending a Message to a Specific Participant

To send a chat message to a specific participant in a meeting, follow these suggested steps:

1. With the Chat panel on screen, press SHIFT and TAB until the To: button is selected. Upon doing this, NVDA will say "To: Everyone, dropdown button".
2. Press ENTER to activate the To: button. Upon doing this, a dropdown menu will be displayed, containing the names of all participants in the meeting. NVDA will announce the currently selected name in the list. By default, this will be "Everyone".
3. Press DOWN ARROW to navigate the list of names. When you've selected the participant you wish to send a chat message to, press ENTER to choose the name and close the dropdown menu.
4. Now, press TAB until the Input chat text box is selected. Upon doing this, NVDA will say "Input chat text, type message here".
5. Type your message and then press ENTER to send it. A second or so later, the person you sent the message to will receive it!

Reading the Chat History

As you send and receive messages, a history of the chat is stored in a list, directly beneath the Input Chat Text edit box.

To read the Chat History, follow these suggested steps:

1. Press SHIFT and TAB until the To: button is selected. Upon doing this, NVDA will say "To:", followed by the name of the last participant you sent a message to. Don't press ENTER here, you are just using this as a reference point.
2. Now press SHIFT and TAB to move focus to the Chat History list. Upon doing this, NVDA will say "Chat text list" and will then read the first message in the list. For reference, this will include the name of the participant who sent it, who it was sent to and the time it was sent.

Note 4: Messages in the history list are displayed in reverse chronological order. This means that the oldest message will be at the top of the list and the newest will be at the bottom!

3. Press DOWN ARROW to read the messages that have been sent during the meeting. If you accidentally move past a message, press UP ARROW to move back to it in the list.

Note 5: When in the Chat History list, you can press HOME to move to the top of the list or END to move to the bottom of the list. The ability to do this might be helpful if you are looking for a message which was sent earlier in the meeting or towards the end of the meeting!

When you've finished chatting, press ALT and H to close the Chat panel and return to the Zoom meeting screen.

Stopping NVDA from Speaking during a Meeting

During a meeting, NVDA will announce when a participant has joined or left the meeting, as well as all messages that are sent to everyone. Having this information announced, whilst being extremely useful, can make it difficult to concentrate on what the active speaker is saying. Therefore, it's a good idea to temporarily mute NVDA. This will ensure that the only thing you hear are the participants of the meeting.

To temporarily mute NVDA, press INSERT and S until NVDA says "Speech mode off". This will result in the speech being temporarily muted.

Now, as the meeting progresses, all you'll hear is the meeting itself, and nothing from NVDA! To unmute NVDA, simply press the keyboard shortcut INSERT and S, until NVDA says "Speech mode talk". Upon doing this, NVDA will begin to speak all announcements once more.

Recommendations for Attending a Zoom Meeting

When attending a Zoom meeting, it's recommended that you wear a pair of headphones. This will ensure that other participants don't hear announcements from NVDA. Also, it's recommended to mute your audio when other participants are speaking. This will ensure that any background noises from your location are not picked up by your microphone. Finally, it's recommended to have as little activity going on behind you as possible, as this could be distracting to other participants. Of course, you could always turn off your video, but this may not always be practical!

Exiting a Zoom Meeting

There are 2 common methods of exiting a Zoom Meeting. The first method is for the Host to end the meeting. Upon doing this, all participants will be disconnected from the meeting. The second method is to activate the Leave button by pressing the keyboard shortcut ALT and Q. Upon doing this, a message box will be displayed and NVDA will say "Leave meeting?". Two buttons will be available, labelled Leave Meeting and Cancel. Press TAB until the Leave Meeting button is selected and then press ENTER. Upon doing this, you'll leave the meeting!

This is the end of the introduction to joining and participating in a Zoom meeting in conjunction with NVDA. Happy Zooming!

Contacting the Author

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