

# zoom and security

New Time Music 2.0, Miracle of Sound Conference (online), June 4<sup>th</sup> 2020  
Mika Arvola, System specialist, Turku University of Applied Sciences

# Mika's background



- In TUAS since 2005
- International RDI-projects related to videoconferences in different fields from 2006
- Videoconference (H.323 / SIP) administrator in TUAS from 2010
- Zoom administrator in TUAS from 2018/2019
- Part of internal "AV-group" which is planning different solutions for meeting rooms etc.
- Shareholder and consultant in one company which is developing own videoconference software
- Before 2005, working in music industry as a sound and light technic, deejay and recording artist
- Technology freak since 1985
- Electronic music enthusiast

# Some headlines



Dayton organization  
the latest to get Zoom  
'bombed' with racist  
slurs, hate images

## Pornographic 'Zoombombing' interrupts Wallingford Town Council meeting



'Zoom-Bombing' Hijacks Online Class Meetings In Massachusetts, FBI Warns

100 788 katselukertaa • 30.3.2020

👍 374    🗨️ 415    ➡️ JAA

... from Wallingford's virtual Town Council meeting Tuesday night April 28, 2020 with a portion blocked out  
or a person interrupting the meeting with graphic content.

# Reasons behind these headlines

- In today's "Ask Eric Anything" webinar, Zoom founder and CEO Eric S. Yuan provided more progress updates on our 90-day security plan, including exciting announcements about Zoom 5.0 and **surpassing 300 million daily Zoom meeting participants.**  
<https://blog.zoom.us/wordpress/2020/04/22/90-day-security-plan-progress-report-april-22/>
- To put this growth in context, as of the end of December 2019 was approximately 10 million  
<https://blog.zoom.us/wordpress/2020/04/01/a-message-to-our-users/>
- Zoom has exploded in popularity as people are working remotely, so there are also millions of users who haven't used videoconferences earlier. Links were shared publicly etc., there are meetings instead of webinars etc. (same rights vs. restricted rights)
- More users, more popularity, more "delicious" headlines
- There was some security issues (old ones also in news), but all software is having security fixes from time to time

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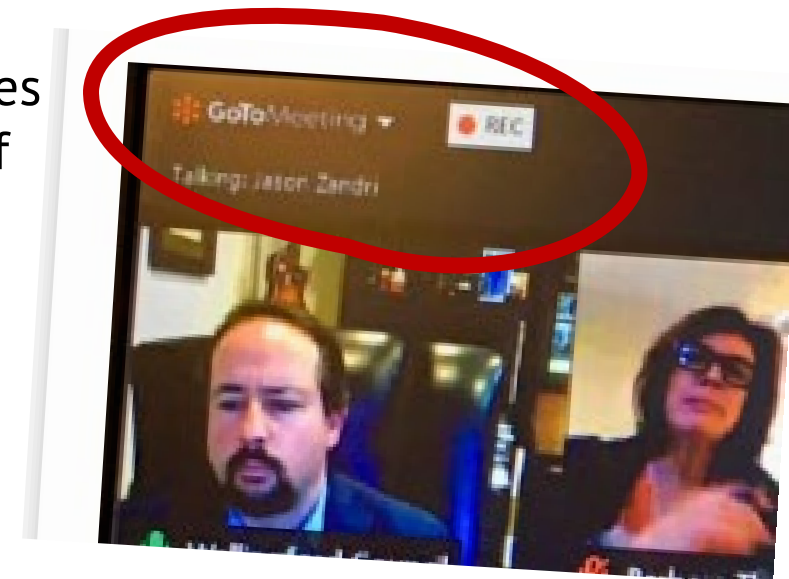
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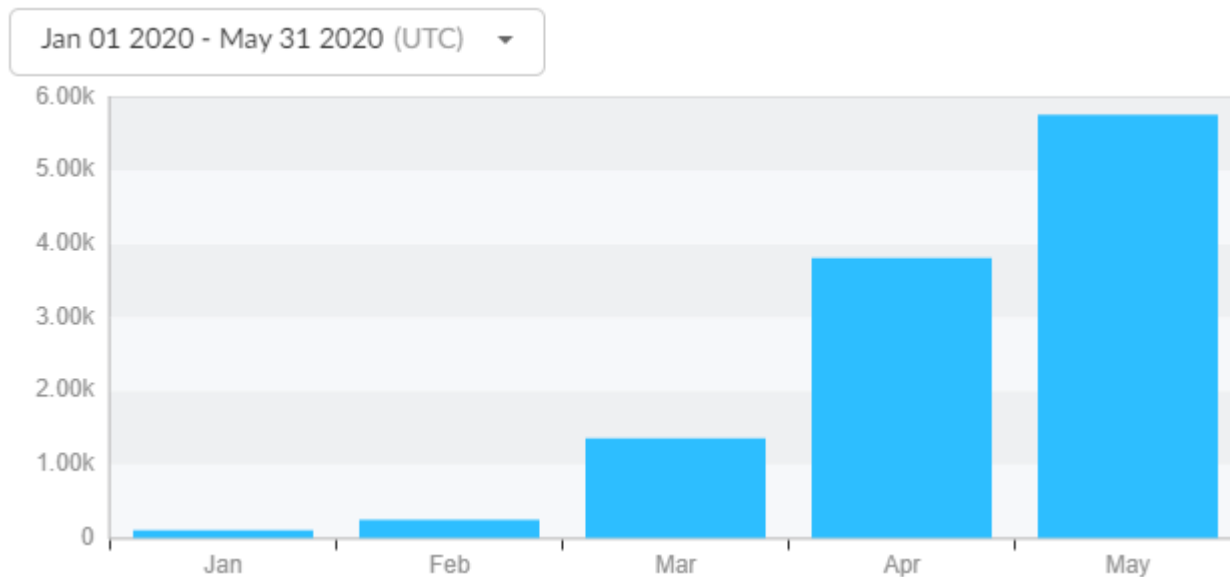
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# Usage statistics, real life example

Example from TUAS, Zoom usage in 01-05/2020:



\*) Zoom was not used widely in TUAS at the beginning of 2020 (more like internal testing), we planned to start using it more at Q1/2020

Jun 3, 2020 09:15	09:26	10:18	3
Jun 3, 2020 09:01	10:59	01:57:57	5
Jun 3, 2020 08:52	11:28	02:35:45	24
Jun 3, 2020 08:50	11:06	02:15:32	179
Jun 3, 2020 08:49	09:50	01:00:57	3
Jun 3, 2020 08:45	09:15	30:07	35
Jun 3, 2020 08:39	13:13	04:34:15	17
Jun 3, 2020 08:36	11:07	02:30:55	51
Jun 3, 2020 08:32	08:47	15:20	2
Jun 3, 2020 08:08	15:23	07:14:46	44
Jun 3, 2020 07:42	08:51	01:08:53	25
Jun 3, 2020 07:40	07:41	00:43	3
Jun 3, 2020 07:44	08:05	01:44:57	2

First 1.5 hours of Jun 3th  
incl. duration and participants

# Balancing between "secure" and "unsecure"

Zoom is as "secure" or "unsecure" as most of the other videoconference softwares are.

Easy to join

- "just click link"
- no hassle before meeting
- more time for meeting

**Less "secure"**



Hard to join

- registration
- user ID + PW
- login with PIN
- open meeting
- ...

**More "secure"**

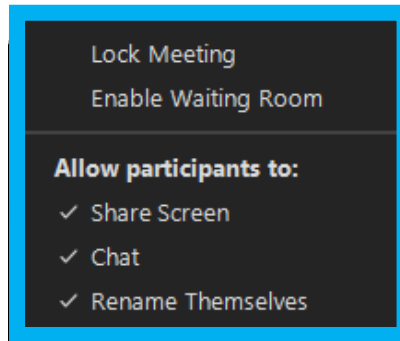
# Tips for daily use, setting up a meeting

- Don't use your PMI (personal meeting ID) unless you know why and when you should use it. Instead of PMI, **generate new meeting ID** for each meeting. Use calendar to manage upcoming meeting ID's, for example Outlook (+ Zoom plugin) (backup is <https://zoom.us/meeting>)
- Do not publicly share your meeting ID and/or passwords. Earlier screenshots etc. were also containing ID's, newer versions are masking these.
- **Meetings are not designed for large-scale or public events where you post the invite on the internet. Instead, use Zoom Webinars (depends your license).**
- Keep Zoom default security features on - waiting rooms, passwords, and restricted screen sharing.
- Password protection? Learn how to use it, it's maybe coming mandatory for On-Premise installations too. Registration? Nah, too much hassle.
- Take your time and have a look in your default settings too, <https://zoom.us/profile/setting>

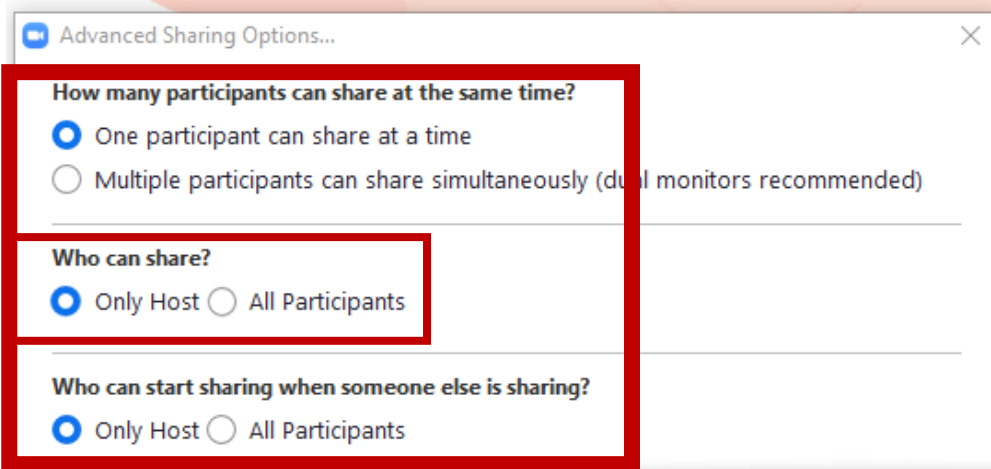


# Tips for daily use, in a meeting

Get to know host privacy and security features like Stop Video, Mute All, Remove Participants, Put in Waiting Room and Lock Meeting.



- Lock Meeting
- Enable Waiting Room
- Allow participants to:**
  - ✓ Share Screen
  - ✓ Chat
  - ✓ Rename Themselves



Advanced Sharing Options...

How many participants can share at the same time?

One participant can share at a time

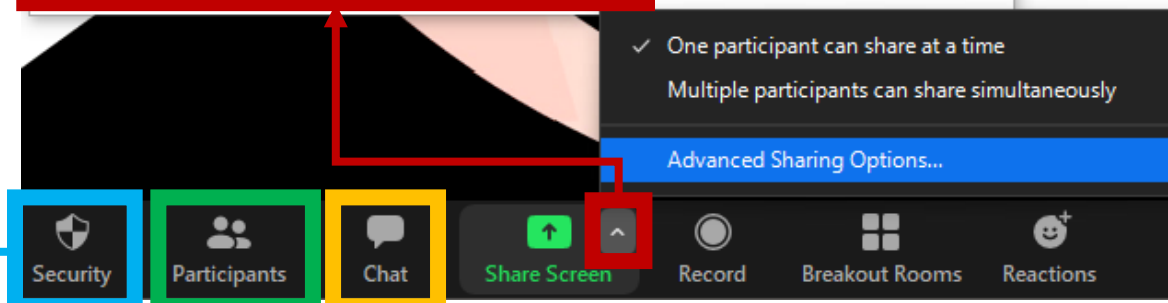
Multiple participants can share simultaneously (dual monitors recommended)

Who can share?

Only Host  All Participants

Who can start sharing when someone else is sharing?

Only Host  All Participants



✓ One participant can share at a time

Multiple participants can share simultaneously

Advanced Sharing Options...

Security

Participants

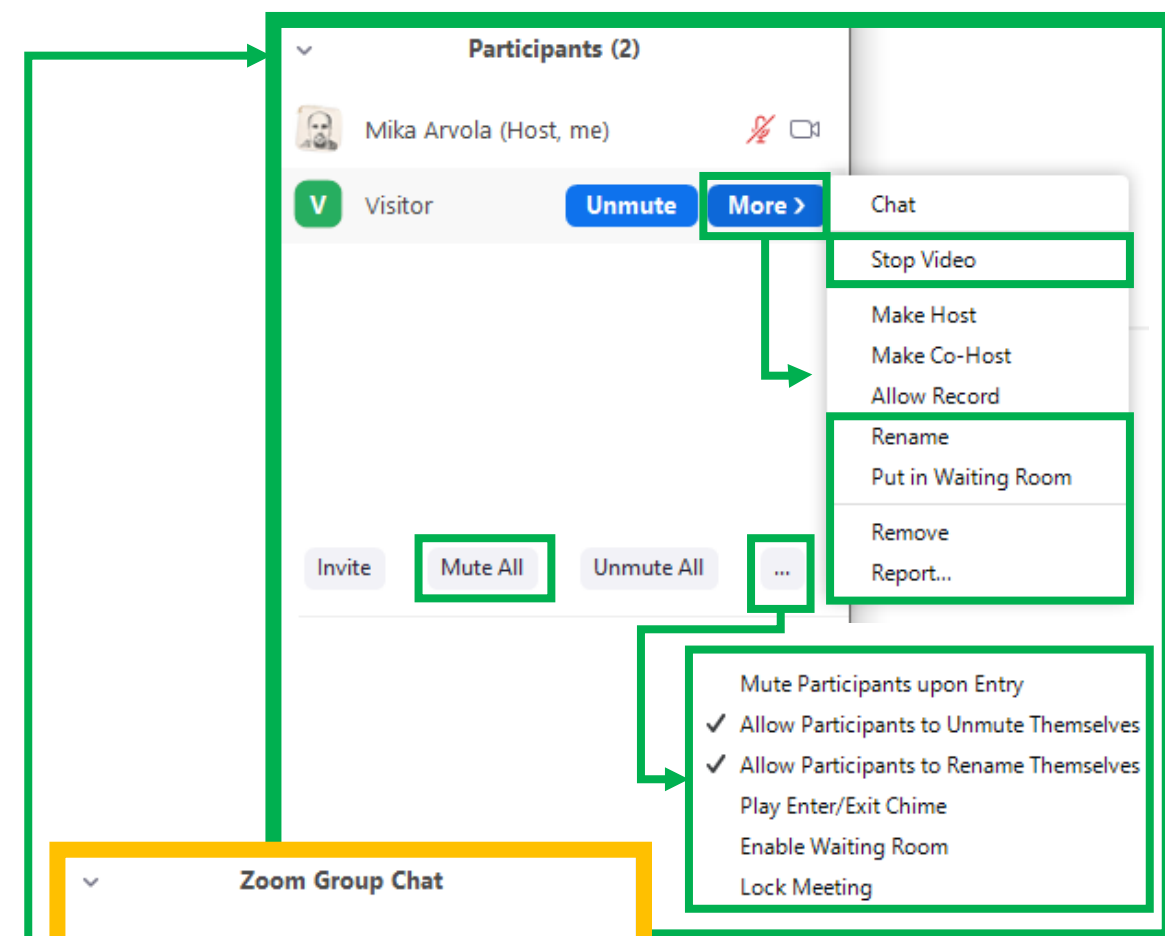
Chat

Share Screen

Record

Breakout Rooms

Reactions



Participants (2)

Mika Arvola (Host, me)

Visitor

Unmute

More >

- Chat
- Stop Video
- Make Host
- Make Co-Host
- Allow Record
- Rename
- Put in Waiting Room
- Remove
- Report...

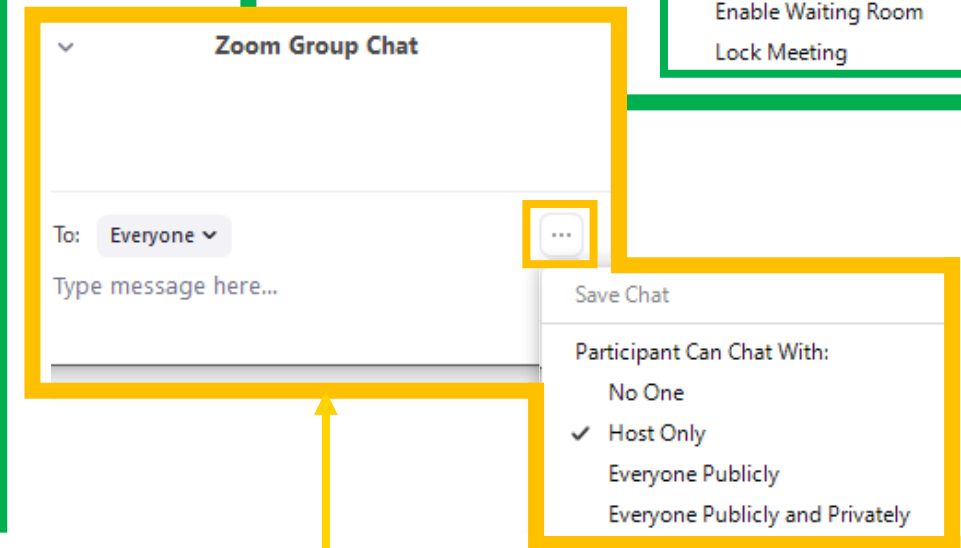
Invite

Mute All

Unmute All

...

- Mute Participants upon Entry
- ✓ Allow Participants to Unmute Themselves
- ✓ Allow Participants to Rename Themselves
- Play Enter/Exit Chime
- Enable Waiting Room
- Lock Meeting



Zoom Group Chat

To: Everyone

Type message here...

Save Chat

Participant Can Chat With:


- No One
- ✓ Host Only
- Everyone Publicly
- Everyone Publicly and Privately

# Tips for sharing recordings, external service

- <https://zoom.us/recording>, select you recorded meeting

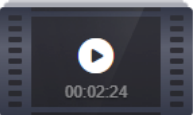
Hover with mouse to see  
grayed areas...


My Recordings > testikutsu










testikutsu  Share

Mar 2, 2020 15:40 Kiev ID: 466 3E

5 total views • 1 total downloads [Recording Analytics](#)

 **Recording 1**  
3 files 28 MB

Download (3 files) Copy shareable link 

 Shared screen with speaker view	  	0 views this month	27 MB
 Audio only			958 KB
 Chat file	  	0 views this month	30 B

Download MP4, edit and upload  
where you want

download chat file

# Tips for sharing recordings, from Zoom

- <https://zoom.us/recording>, select your recorded meeting

My Recordings > testikutsu

testikutsu

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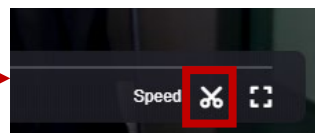


0 views this month

30 B

delete chat if needed (permanently)

if you need to trim,  
click video icon,  
then scissors



Share this cloud recording

Share this recording

Publicly

Only authenticated users can view

Add expiry date to the link

Viewers can download

On-demand(Registration Required)

Password protection

Recording Link Information

Display detailed information >

Copy sharing information to clipboard

Done

Topic: testikutsu  
Date: Mar 2, 2020 15:40 Kiev

Meeting Recording:  
[https://zoom.us/rec/share/vtEvlpfZ92NOcs\\_wsVDAAnqX6a82yhK\\_NL9jvN6ScsShCfu3o1o7WYKN6IXcM8](https://zoom.us/rec/share/vtEvlpfZ92NOcs_wsVDAAnqX6a82yhK_NL9jvN6ScsShCfu3o1o7WYKN6IXcM8)

# You're welcome.

Questions or feedback, contact  
[mika.arvola@turkuamk.fi](mailto:mika.arvola@turkuamk.fi)

#Excellence  
In Action