

Teleconferencing Security Hackathon

Cybersecurity Awareness Month
October 3, 2020

Overview

- Pain Point
- Tools / Examples
- Considerations / Evaluation

Pain Point (Problem Requiring a Solution)

- Increasing use of remote meetings (many users lack tech / security knowledge)
- Security and privacy incidents:
 - “Zoom bombing”
- Best practices for Video Conferencing Security Proposal
- Acknowledge risks and how to mitigate

Best Practices (Li-Ann)

- Teleconference systems are not considered secure, and the following minimum security controls should be considered to prevent unauthorized disclosure of sensitive Company information:
- Require passwords for access
- Announce arrival and departure of participants
- Monitor or record the conference
- Organization should ensure an evaluated firewall in a gateway environment should use an evaluated video or voice-aware firewall of at least the same level of assurance to secure the information shared via video conferencing or IP telephony.
- Organization must separate the video conference traffic from other data traffic either physically or logically

Best Practices Continued (Li-Ann)

- Organization should ensure an encrypted and non-replayable two-way authentication scheme should be used for call authentication and authorisation.
- Organization personnel must not connect workstations to video conferencing units unless the workstation or the device uses VLANs or similar mechanisms to maintain separation between video conferencing and other data traffic.
- Ensure all participants have a need to know
- System should be configured to provide an explicit indication of current participants and attendance list should be maintained and checked.
- Obtain non-disclosure forms as necessary
- Distribute minutes securely

Wireframe Examples (<https://plantuml.com/salt>)

Host

Host Controls

Record this session

^Store recorded session On this device? On the cloud?)

Stream this session

Mute / unmute participant

Make a user host

☐ Remove a user

☐ Allow removed user(s) to rejoin?

Chat (everyone, presenters, other individual participant(s))



Participants

Participant Controls

Display name: _____

Mute / unmute myself

☐ Enable video?

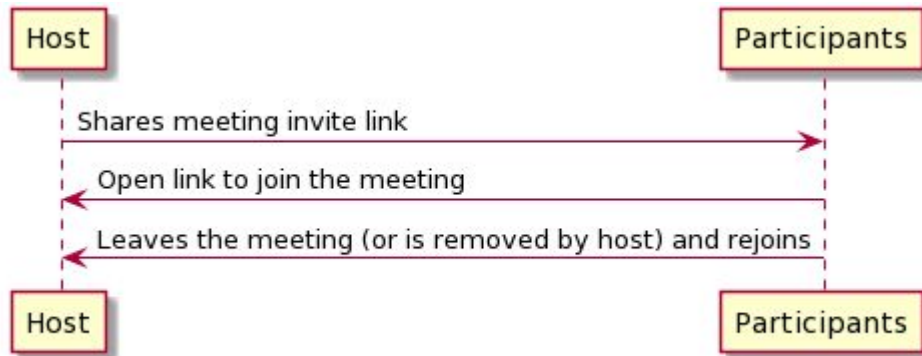
Audio Settings (built-in microphone, external microphone)



Invite Link Example (host <- link -> participant)

- Generate session?
- Same link (with same user ID per host's account)?

PlantUML sequence diagram: <https://plantuml.com/sequence-diagram>



Considerations / Evaluation

- Privacy (users' information)
- Access by non-registered users

Please send some submissions to all 3 of us, by 6pm (EDT) today:

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