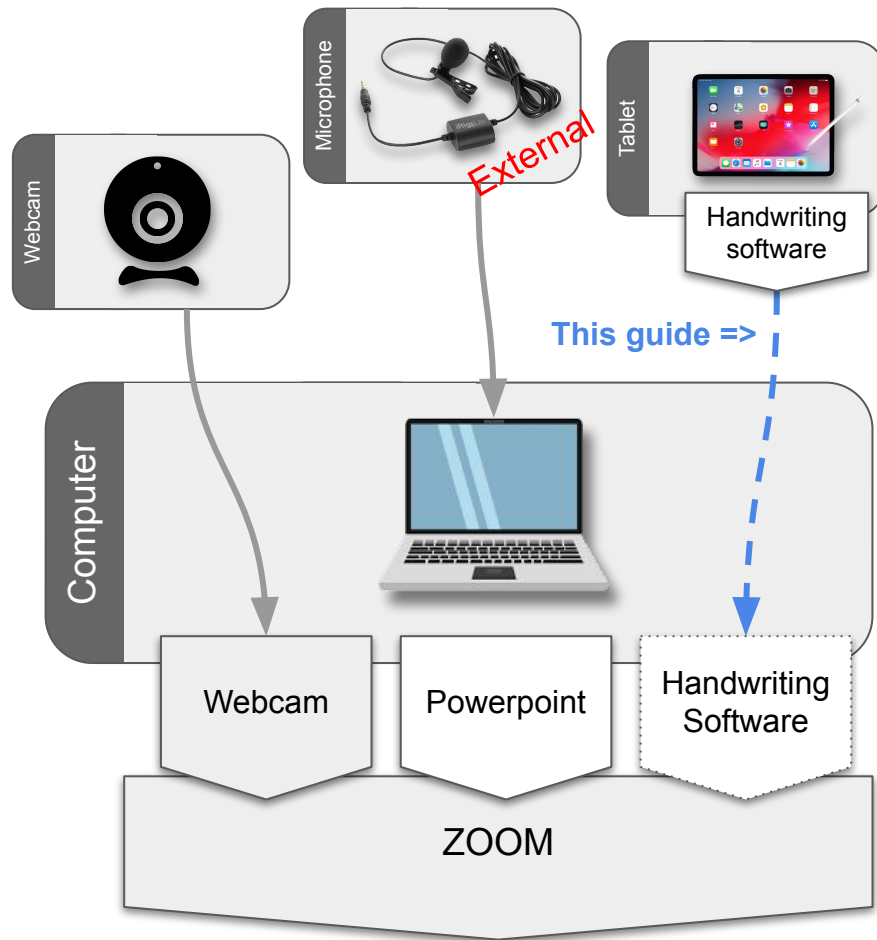# Using a Tablet to Handwrite and Annotate

Center for Digital Education (CEDE)
Teaching Support Center (CAPE)
Service Audiovisuel (SAVE)

Feedback and Support: flexible-teaching@epfl.ch
More information: https://go.epfl.ch/flexible-teaching
On campus assistance: save@epfl.ch

Connect Laptop and Tablet

Run your ZOOM session on your laptop to "stream while recording" and use the tablet as a secondary device to do handwriting and annotations.

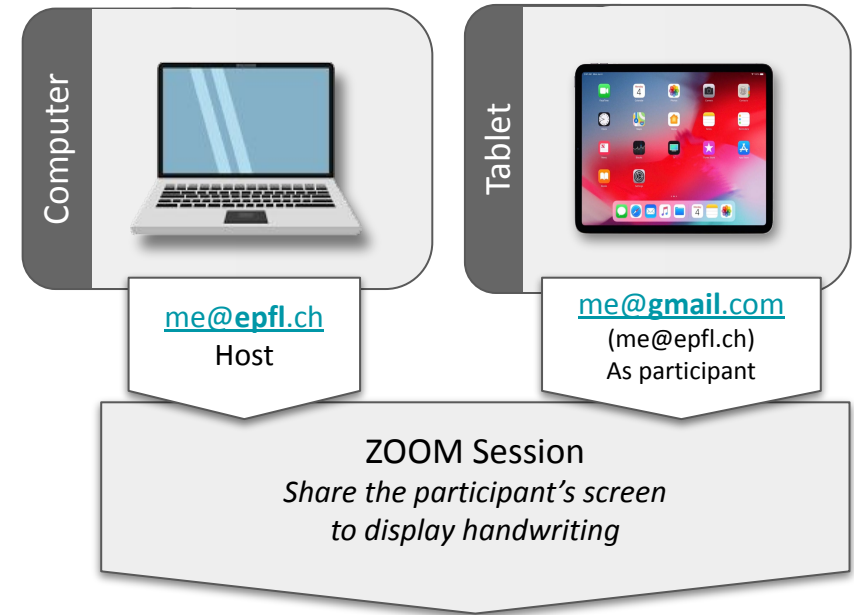|		**Apple Laptop + iPad**	**Windows Laptop + iPad**	**Other laptops and tablets**
Dual Connection (easiest)	Join the ZOOM session with your tablet as a 'participant'. Share the screen of this participant from the laptop to display the tablet. + Allows you to move with the tablet; + Quick setup; - Connection depends on WiFi.	X	X	X
HDMI cable	Connect your tablet with an HDMI cable to an Elgato encoder connected to your laptop + Stable connection; - More hardware connections; - Limits movement.	X	X	X
Apple cable	Use the dedicated Apple connector to link your laptop and the iPad	X		
AirPlay	Use wireless AirPlay link - Only works **from home** (not at EPFL)	X		

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Dual Connection

Principle:

Join the ZOOM session with your tablet as a 'participant'. Share the screen of this participant from the laptop to display the tablet.

Pros and Cons:

- \+   Easiest to set up
- \+   No cables required
- \-   Requires to participate to the ZOOM meeting with two connections.

Note:

It also works when using the epfl account on both devices, but there is a risk that ZOOM mixes up which device is recording. Safest is to use another account for the iPad.

Computer

Tablet

me@**epfl**.ch
Host

me@**gmail**.com
(me@epfl.ch)
As participant

ZOOM Session
*Share the participant's screen
to display handwriting*
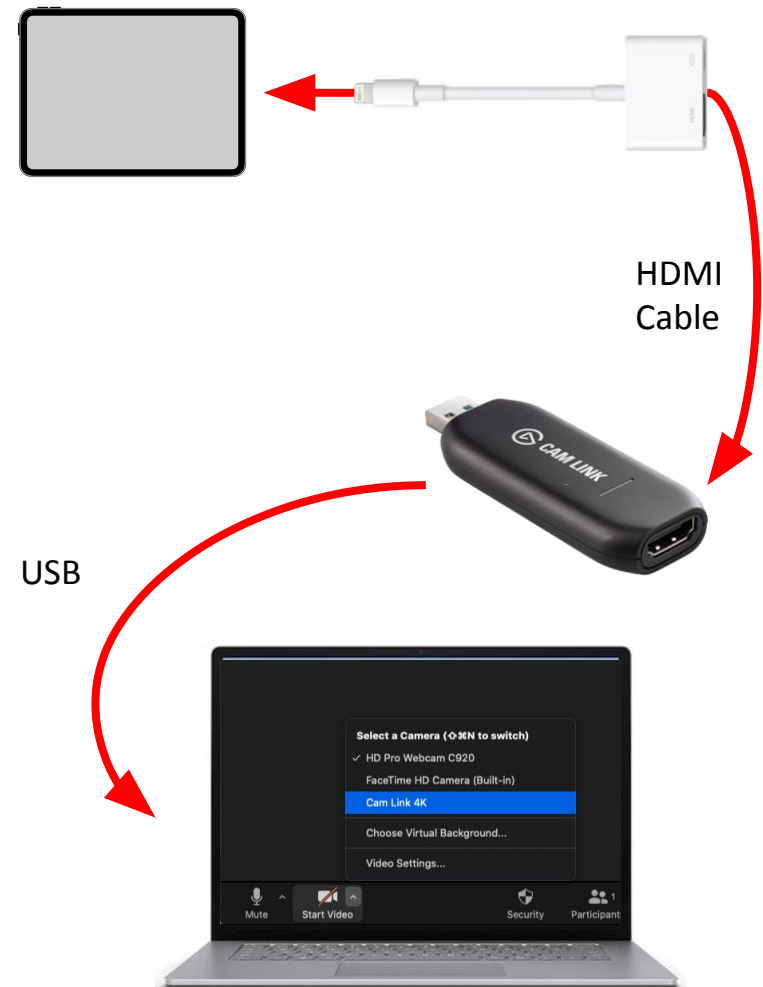
EPFL

HDMI Cable

Principle:

Transform the output of the tablet (or of anything that has an HDMI output) into a video stream by using an HDMI adapter. The laptop sees the tablet as a webcam that you can share from within ZOOM or Kaltura Capture.

Pros and Cons:

+   Stable connection;
+   Works with both ZOOM and Kaltura Capture;
+   Allows Goodnotes to send only the slide to Zoom without the toolbars cluttering the screen;
-    Requires additional hardware;
-    Limits movements to the length of the HDMI cable.

Shopping list:

- Elgato Cam Link 4K (80 CHF)
- Adapter to transform tablet output to HDMI
  - For older iPads via Lightning cable (50 CHF)
  - For new iPad Pro via USB-C connector (25 CHF)
- HDMI – HDMI cable (25 CHF)

HDMI
Cable

USB

EPFL

Laptop – iPad Cable

Principle:

Connect your iPad to your Apple laptop with a Lightning or USB-C cable.

Pros and Cons:

- +   Stable connection;
- +   Works from EPFL;
- -   Does not work with Kaltura Capture;
- -   The Goodnotes toolbars are visible in the stream / recording;
- -   Limits movements to the length of the cable.

Steps:

- ●   Establish the connection once before the course;
- ●   On first connection, the iPad and/or the laptop ask whether they should trust each other. Say Yes both times;
- ●   In ZOOM, choose Share → Advanced → iPhone/iPad via cable.

Get a cable that fits the iPad on one side and the laptop on the other side. It will be a cable that combines Lightning, USB and USB-C connectors.

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AirPlay

Principle:

Connect the iPad to your Apple Laptop wirelessly with AirPlay and mirror the screen.

Pros and Cons:

+ Allows Goodnotes to send only the slide to Zoom without the toolbars cluttering the screen;
+ Will keep the screen ratio of your slides (should be 16:9) and this will match your HD video recording of your webcam in 16:9;
- Apple laptops only;
- Does **not work on campus** because of WiFi restrictions.

Make sure that:

● Setup AirPlay (see slide 25 in the Home Studio guide);
● The session is recorded from your laptop;
● Mute the iPad audio (microphone and speaker) to avoid interferences.

At Home

- To get the best out of your pre-recordings (and live streams) at home
  - [Home Studio setup guide](#)
  - [Tips for lecture recording](#)

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Support
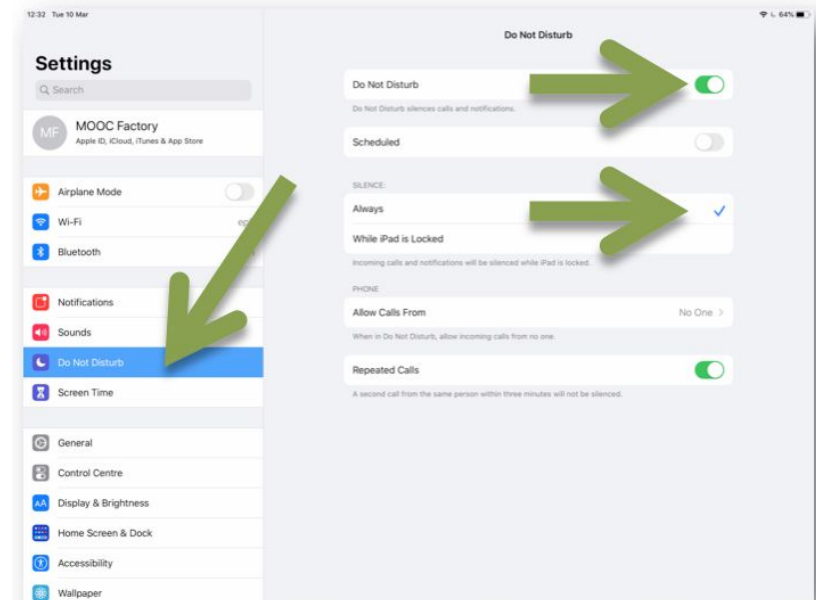
https://go.epfl.ch/flexible-teaching

flexible-teaching@epfl.ch

For **on campus** questions related to room equipments write to: save@epfl.ch

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Getting Ready to Use the iPad

General Settings:

- Enable 'Do not Disturb' in your iPad general settings and set 'Silence' to 'Always';
- Close all apps on your iPad except ZOOM and the other presentation apps;
- Disable the audio when using the iPad as a secondary device that connects to the laptop.

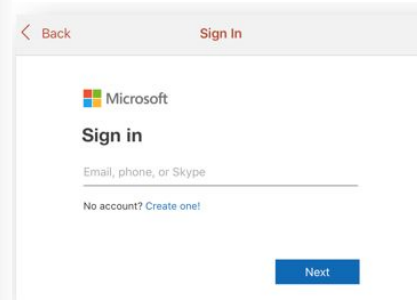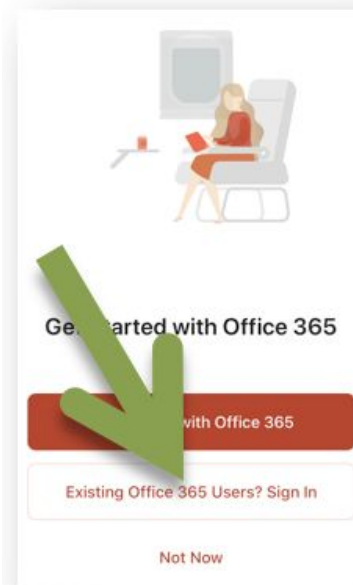# Set Up Your Apps to Use the iPad
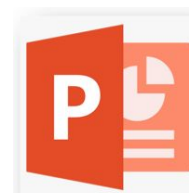
Set-up ZOOM for your iPad
- Download the ZOOM app onto the tablet;
- Create a ZOOM account with your personal e-mail address to join the session as a participant. NB: also works with your EPFL account.

Setting up Goodnotes:
- Goodnotes is the preferred whiteboard application on iPads;
- You can import PDFs in Goodnote to present and annotate;
- iPad lent by EPFL: if Goodnotes is not pre-installed, contact 1234@epfl.ch;
- Your own iPad: download and open Goodnotes (not free);
- No login required.

Setting up Powerpoint for iPad:
- Download the app;
- Select 'Existing user';
- Sign in with your EPFL email and your EPFL Office 365 password;
- **Do not use** your Gaspar password.

Set Up Your EPFL Office 365 Account

- Go to https://office.com/teachers;
- Type your EPFL email address and click on Start;
- Click on "I'm a teacher";
- Check your e-mail for a verification code;
- Provide your personal details and verification code to create your account;
- Save password for future use;
- Download Microsoft Office software or apps.